



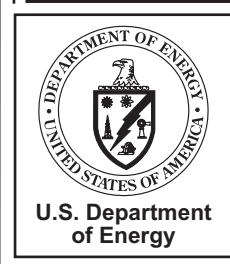
# Pinellas Environmental Restoration Project

## Quarterly Progress Report

### 4.5 Acre Site

### January through March 2004

April 2004



**Pinellas Environmental Restoration Project  
Quarterly Progress Report  
4.5 Acre Site**

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Work Performed by S.M. Stoller Corporation under DOE Contract No. DE-AC01-02GJ79491  
for the U.S. Department of Energy Office of Legacy Management, Grand Junction, Colorado

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## Acronyms and Abbreviations

bls	below land surface
COPC	contaminants of potential concern
DCE	dichloroethene
DOE	U.S. Department of Energy
DPE	dual-phase extraction
DPT	direct push technology
FDEP	Florida Department of Environmental Protection
ft	feet
IRA	Interim Remedial Action
$\mu\text{g/L}$	micrograms per liter
$\mu\text{mhos/cm}$	micromhos per centimeter
MCL	maximum contaminant level
mg/L	milligrams per liter
mV	millivolts
NGVD	national geodetic vertical datum
NTU	Nephelometric Turbidity Units
RPD	relative percent difference
STAR Center	Young - Rainey Science, Technology, and Research Center
TCE	trichloroethene
TCOPC	total contaminants of potential concern
VC	vinyl chloride
VOCs	volatile organic compounds
WWNA	Wastewater Neutralization Area

## 1.0 Introduction

The *Pinellas Environmental Restoration Project Quarterly Progress Report for the 4.5 Acre Site* describes environmental restoration activities for the Pinellas 4.5 Acre Site located in Pinellas County, Largo, Florida. The former U.S. Department of Energy (DOE) Pinellas Plant facility consisted of the 4.5 Acre Site and the Young - Rainey Science, Technology, and Research Center (STAR Center) ([Figure 1](#)). The facility was constructed in the mid-1950s as part of a nationwide nuclear weapons research, development, and production complex. Production of weapons-related components ceased in September 1994. However, as a result of these operations, contamination exists in the surficial ground water beneath the Site.

Administration of DOE activities at the 4.5 Acre Site is the responsibility of the DOE Idaho Operations Office. Responsibility for environmental restoration activities at the 4.5 Acre Site was transferred from DOE's Pinellas Area Office to DOE's Grand Junction Office in October 1997. S.M. Stoller Corporation (Stoller), a prime contractor to DOE's Office of Legacy Management at Grand Junction (formerly DOE's Grand Junction Office), provides technical support to DOE for remediation and closure of all active solid-waste management units on site and for the 4.5 Acre Site.

The 4.5 Acre Site is located to the northwest of the STAR Center, northeast quarter of Section 13, Township 30 South, Range 15 East ([Figure 2](#)). This parcel was owned by DOE from 1957 to 1972, at which time it was sold to a private landowner. During the period of DOE ownership, the property was used for disposal of drums of waste resins and solvents. As a result of this practice, the surficial aquifer was impacted by volatile organic compounds (VOCs), primarily vinyl chloride (VC), toluene, trichloroethene (TCE), and 1,2-dichloroethene (DCE). DOE completed a source removal in 1985.

An Interim Remedial Action (IRA) consisting of ground water extraction and treatment via air stripping, and a routine ground water monitoring program were initiated in May 1990. In July 1997, a modification of the IRA involving installation of dual-phase extraction (DPE) wells provided a more aggressive system to remove ground water contamination. In November 1999, the DPE/air-stripping system was replaced with an in-situ biosparging treatment system.

Currently, ground water cleanup is proceeding according to provisions in the document *Remediation Agreement for the Four and One-Half Acre Site in Largo, Pinellas County, Florida* (Remediation Agreement) (FDEP 2001), an agreement between DOE and the Florida Department of Environmental Protection (FDEP); and in accordance with applicable portions of "Corrective Actions for Contamination Site Cases," an appendix to FDEP's *Enforcement Manual* (FDEP 1999).

The *4.5 Acre Site Biosparge System Integration Plan* (DOE 2000) was approved by FDEP on January 17, 2001. This plan states that performance monitoring would be undertaken on a quarterly basis. Therefore, in April 2001, performance monitoring of the remedial system through the use of direct push technology (DPT) was undertaken. However, the biosparging systems were shut off in May 2003 with no plans to restart them and no performance monitoring data have been collected since April 2003. Subsequent monitoring will be adapted to fit the new remediation scenario and performance monitoring as defined in the *Interim Remedial Action Plan for Ground Water Recovery at the 4.5 Acre Site* (DOE 2003).

The IRA Plan for Ground Water Recovery at the 4.5 Acre Site was submitted to FDEP on August 29, 2003, and approved by FDEP on September 19, 2003. The plan provides a conceptual design for an interim remedial action consisting of a temporary ground water recovery system to contain the contaminant plume on site. The IRA final design will be presented in an addendum to this document. The temporary measure was outlined in the Remedial Action Plan as a contingency option in the event that biosparging resulted in extending the contaminant plume. The final, long-term remedy selection and conceptual design is planned for submittal to FDEP by June 1, 2004, and when approved, will become an addendum to the Remedial Action Plan.

This document is the quarterly progress report for the 4.5 Acre Site for January through March 2004, as requested by FDEP. The results of monitoring activities and a summary of ongoing and projected work are provided in this report.

## 1.1 Site Update

The design of an IRA ground water treatment system within the 4.5 Acre Site was submitted to FDEP in mid-December 2003. In late February 2004, five monitoring wells and three recovery wells were installed. The following table provides completion information. In early March 2004, construction work on the IRA treatment system began. The system consists of an extraction well field (three extraction wells) piping/pump installation, transmission water pipeline, utility connection, installation of an air stripper unit, and effluent piping connection to the Wastewater Neutralization Area (WWNA). Upon approval by FDEP, startup is scheduled for April 2004 and will be summarized in the next quarterly report.

### *New 4.5 Acre Site Monitoring Well Construction Information*

Location ID	Depth of Well (ft bbls)	Well Diameter (inches)	Screen Interval (ft)	Date Established
M055	31	2.0	21-31	1/23/04
M056	29	2.0	19-29	1/23/04
M057	30	2.0	20-30	1/23/04
M058	30	2.0	18-28	1/23/04
M059	29	2.0	19-29	1/22/04
RW01	28	4.0	7-27	1/21/04
RW02	30	4.0	10-30	1/22/04
RW03	28	4.0	7-27	1/22/04

## 1.2 Quarterly Site Activities

- Obtained water-level measurements from all monitoring wells on January 13, 2004.
- Conducted the quarterly sampling event (i.e., collected ground water samples from 27 monitoring wells) in January 2004. The wells were sampled for VOCs and analyzed using Method SW-8021B.

- Conducted two one-time sampling events. Ad Hoc PIN-AJ was conducted to characterize drill cuttings prior to disposal. Ad Hoc PIN-AK was conducted to ensure the crushed limestone subbase material being brought in as subfill was not contaminated.
- Resumed a normal sampling schedule after completing 1 year of sampling for lead and arsenic.
- Reported the results of quarterly sampling events (this document).
- Implemented data anomaly tracking software as new data validation procedure.

## 2.0 Monitoring Data

### 2.1 Ground Water Elevations and Flow

Within a 2-hour period on January 13, 2004, depth-to-water measurements were taken in all monitoring wells at the 4.5 Acre Site as part of the sitewide quarterly sampling event. The depth to water in each well was measured with an electronic water-level indicator. The January ground water elevation data for the 4.5 Acre Site are listed in [Table 1](#). The data and information from deep wells were used to construct contours of water levels in the deep surficial aquifer in [Figure 3](#).

The interpretative contours on Figure 3 show ground water flow generally to the northwest. These flow patterns are consistent with those previously observed at the site (i.e., flow to the west-northwest) when the aquifer is under static, non-pumping conditions. The slight ground water low that had been observed around monitoring well PIN20-M049 when water levels were measured following shutdown of the biosparging system has not been observed during the last four quarterly sampling events.

The water table ranged from about 4 to 6.5 feet below land surface (ft bls), with ground water elevations that ranged from a high of 14.12 ft at PIN20-TE01 to a low of 11.45 ft at PIN20-M38D. The hydraulic gradient across the site was approximately 0.004 feet per foot. This gradient is very similar to that observed in April, July, and October 2003. Using Darcy's Law, along with approximations of 1 ft/day for hydraulic conductivity and 0.3 for effective porosity, ground water at the site is estimated to move about 5 ft/year. This velocity is slightly greater than that observed in April, July, and October (3 ft/year), and slightly less than previously observed velocities of 6 to 10 ft/year.

### 2.2 Ground Water Sampling

Twenty-seven monitoring wells were sampled by Stoller personnel in January 2004 for VOCs.

All samples were collected in accordance with the *Pinellas Environmental Restoration Project Sampling Procedures for the Young - Rainey STAR Center* (DOE 2002) using FDEP procedures. All samples collected were submitted to Accutest Laboratory for analysis. Accutest is accredited by the Florida Department of Health in accordance with the National Environmental Laboratory

Accreditation Conference, certification number E83510. VOCs were analyzed using U.S. Environmental Protection Agency Method SW-8021B

All but one well was micropurged with dedicated bladder pumps and the samples were collected when the field measurements stabilized. One well, PIN20-M025, was purged using a peristaltic pump and sampled using Teflon tubing. [Table 2](#) lists measurements of pH, specific conductance, dissolved oxygen, oxidation/reduction potential, turbidity, and temperature recorded at the time each sample was collected. These measurements were collected using a flow cell and multiparameter meter.

## 2.3 Ground Water Analytical Results

Individual contaminants of potential concern (COPC) and total COPCs (TCOPCs) concentrations in samples collected from wells at the 4.5 Acre Site are included in [Table 3](#). The previous four quarters of results are included in Table 3 for comparison. [Figure 4](#) shows the TCOPCs concentrations for January.

No COPCs were detected in samples from the 19 sample locations listed below (results listed in Table 3).

PIN20-0503	PIN20-M023	PIN20-M036	PIN20-M40D	PIN20-MWL3
PIN20-M011	PIN20-M024	PIN20-M053	PIN20-M40S	PIN20-MWL5
PIN20-M012	PIN20-M025	PIN20-M054	PIN20-M41D	PIN20-MWL6
PIN20-M015	PIN20-M035	PIN20-M38D	PIN20-MWL1	

Samples from eight sample locations listed below contained COPCs at detectable levels (results listed in Table 3).

PIN20-0502	PIN20-M019	PIN20-M18D	PIN20-MWL2
PIN20-M001	PIN20-M049	PIN20-M22D	PIN20-MWL4

The maximum TCOPCs value detected was 1,340 micrograms per liter ( $\mu\text{g}/\text{L}$ ) at PIN20-MWL4. The compound detected at the highest concentration in PIN20-MWL4 was cis-1,2-DCE at a concentration of 993  $\mu\text{g}/\text{L}$ . Reported "J" values are not considered in the TCOPC analyte concentrations.

Laboratory reports for quarterly samples collected in January 2004 are provided in [Appendix A](#).

## 2.4 Quality Assurance/Quality Control

Two duplicate samples were compared to their paired sample and the relative percent differences (RPDs) between the results were calculated. Results of analyses for each duplicate sample are listed in [Table 4](#). From the two duplicate samples, 72 individual compounds were analyzed. All analytes met the RPD guideline. All data are considered Class A level, indicating that the data may be appropriately used for quantitative and qualitative purposes.

According to the Stoller Sampling Procedures, duplicate samples should be collected at a frequency of one duplicate for every 20 or less samples. There were 27 ground water VOCs and two duplicate samples. Therefore, the duplicate criteria were met.

A software module for identifying and tracking anomalous ground water data points within the SEEPro database was implemented this quarter. The software prints a report of analytical results that fall outside of historical minimum or maximum values. There was a non-detect value for iron measured in PIN-EFF1 on February 17, 2004, that was anomalously low at 0.048 milligrams per liter (mg/L). The influent sample collected at the same time showed 3.95 mg/L and it is unlikely that the influent and the effluent would be that different. Iron is ubiquitous in the ground water at the Northeast Site at concentrations ranging from 3 to 6 mg/L. Additionally, a chemical is added to the treatment system influent water for the purpose of keeping the iron in solution during the air stripping process. The laboratory was requested to reanalyze the sample, but were unable to because the sample had been discarded. Therefore the sample will be qualified as "R" in the data validation field of the SEEPro database because it is an unusable result.

Two trip blanks were submitted for analysis. Estimated quantities of methylene chloride and toluene that were above the instrument detection limit but below the reporting limit were found in one blank.

No significant deficiencies were found in this quarter's validation of the field data collected during the quarterly sampling event. A software module for identifying and tracking anomalous ground water data points within the SEEPro database was implemented this quarter. The program reports which of the COPC values lie outside of historical minimum and maximums for that location. No anomalies requiring further tracking were found.

### **3.0 Operations Status**

The design of an IRA ground water treatment system within the 4.5 Acre Site was submitted to FDEP in mid-December 2003. In early March 2004, construction work on the IRA treatment system began. The system consists of an extraction well field (three extraction wells) piping/pump installation, transmission water pipeline, utility connection, installation of an air stripper unit, and effluent piping connection to the WWNA. Upon approval by FDEP, startup is scheduled for April 2004.

### **4.0 Tasks to be Performed Next Quarter**

The following tasks are scheduled during the next quarter (April through June 2004).

- Quarterly sampling and analysis of ground water and water level measurements in early April.
- Startup of the new IRA treatment system for short-term ground water recovery action.
- Conduct microbiological, dissolved gas, and geochemical testing to develop an enhanced bioremediation conceptual model.
- Begin preparation of an addendum to Remedial Action Plan.

## 5.0 References

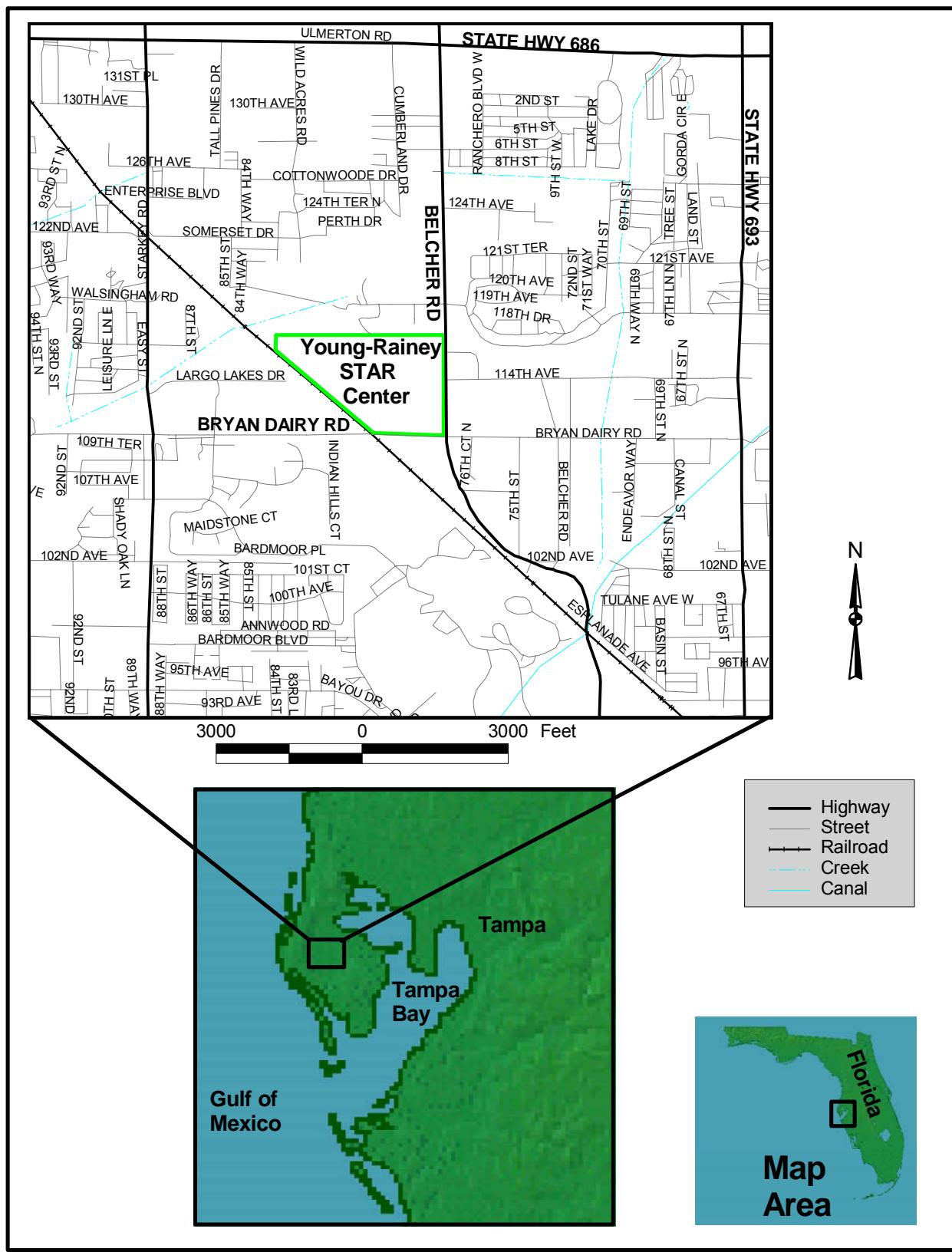
Florida Department of Environmental Protection (FDEP), 1999. "Corrective Actions for Contamination Site Cases," Appendix to FDEP *Enforcement Manual*, May.

\_\_\_\_\_, 2001. *Remediation Agreement for the Four and One-Half Acre Site in Largo, Pinellas County, Florida*, U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado, January.

U.S. Department of Energy, 2000. *4.5 Acre Site Biosparge System Integration Plan*, GJO-2000-182-TAR, MAC-PIN 25.5.1.1, prepared by U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado, December.

\_\_\_\_\_, 2002. *Pinellas Environmental Restoration Project Sampling Procedures for the Young - Rainey STAR Center*, GJO-2001-206-TAR, MAC-PIN 2.4-1, prepared by U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado, July.

\_\_\_\_\_, 2003. *Pinellas Environmental Restoration Project Interim Remedial Action Plan for Ground Water Recovery at the 4.5 Acre Site*, GJO-2003-480-TAC, prepared by U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado, August.



*Figure 1. Young - Rainey STAR Center Location*

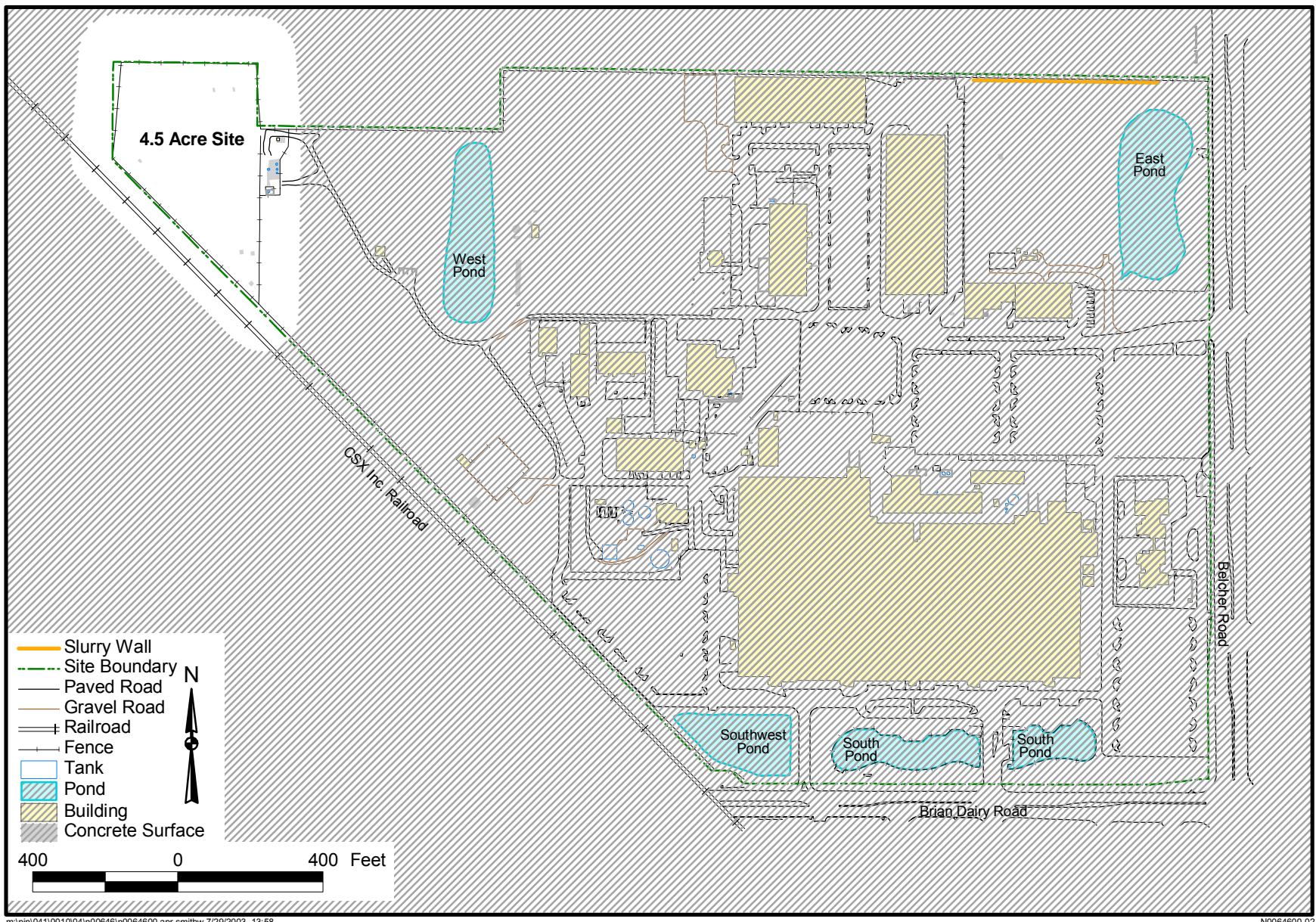


Figure 2. 4.5 Acre Site Location

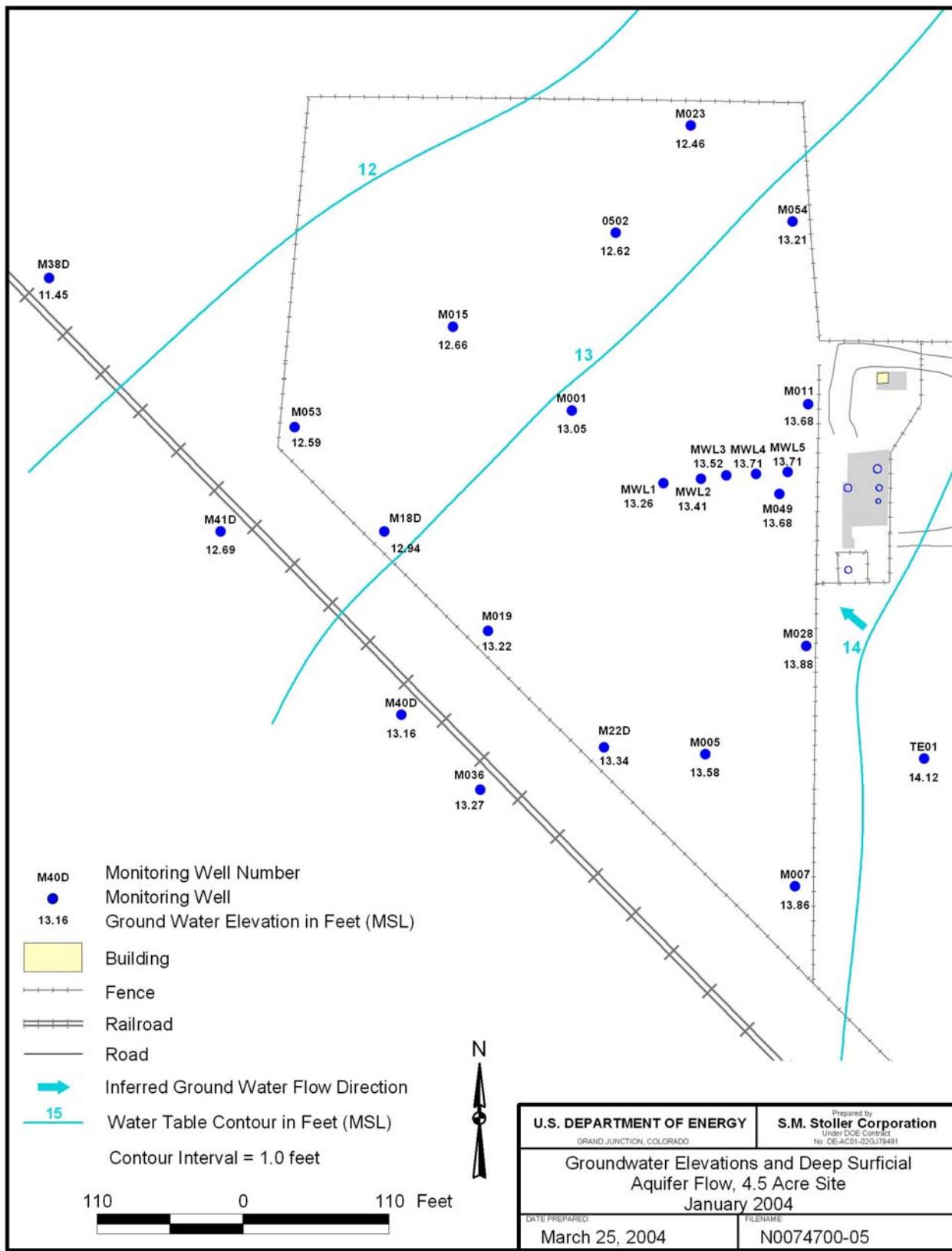


Figure 3. Ground Water Elevations and Deep Surficial Aquifer Flow, 4.5 Acre Site, January 2004

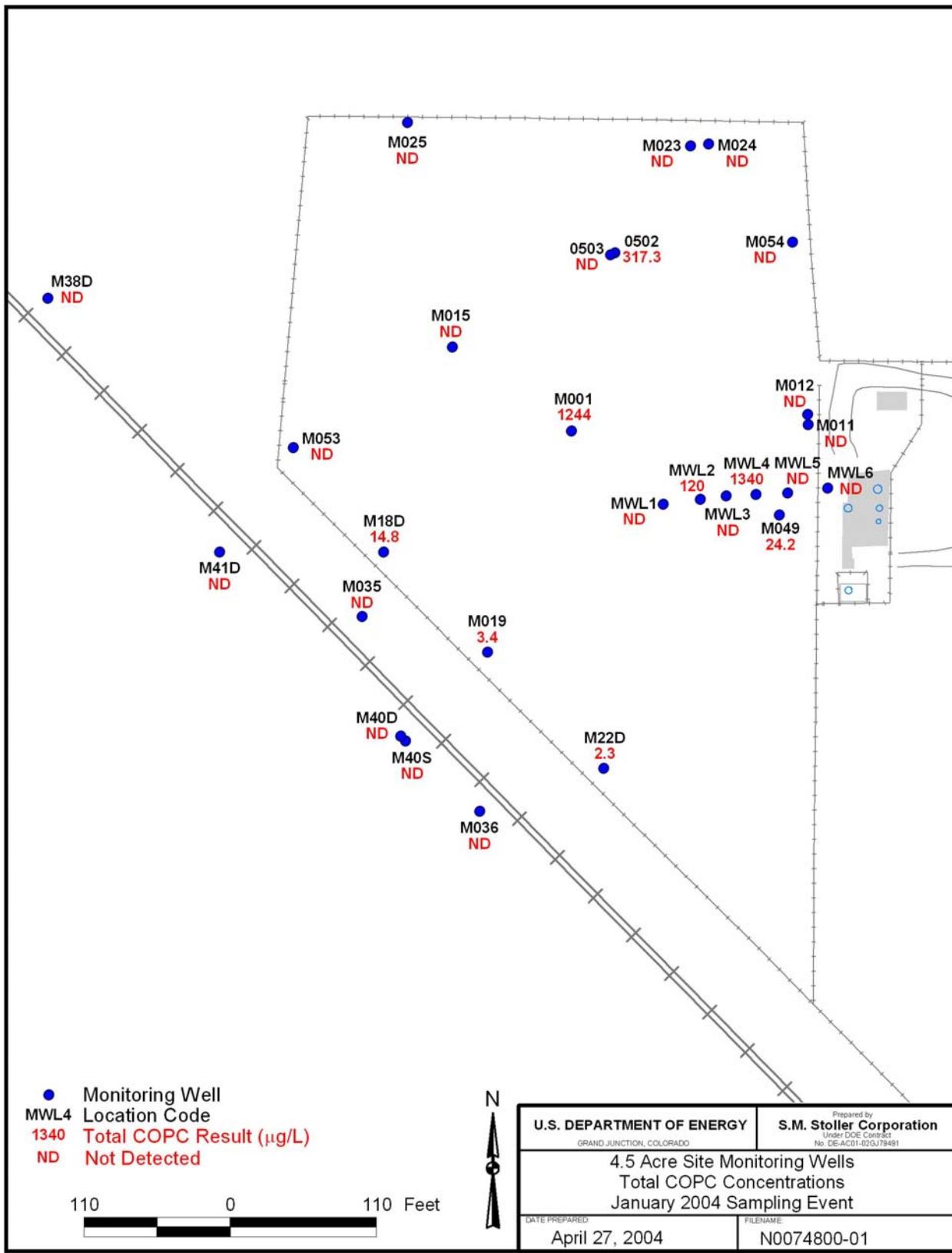


Figure 4. Monitoring Well Locations with TCOPC Concentrations

*Table 1. Water-Level Data at the 4.5 Acre Site*

<b>Location</b>	<b>Measurement Date</b>	<b>Time</b>	<b>Water Depth From Land Surface (ft)</b>	<b>Ground Water Elevation (ft NGVD)</b>	<b>Water Level Flag<sup>a</sup></b>
<b>PIN02</b>			<b>West Pond</b>		
502D	1/13/2004	09:16	3.14	15.36	
W003	1/13/2004	09:20			D
<b>PIN05</b>			<b>Trench Site</b>		
0500	1/13/2004	09:13	3.87	14.63	
<b>PIN20</b>			<b>4.5 Acre Site</b>		
0502	1/13/2004	08:49	4.78	12.62	
0503	1/13/2004	08:48	4.80	12.60	
M001	1/13/2004	08:44	4.55	13.05	
M003	1/13/2004	08:14	4.57	13.63	
M005	1/13/2004	08:15	4.72	13.58	
M007	1/13/2004	08:16	5.59	13.86	
M011	1/13/2004	08:58	4.42	13.68	
M012	1/13/2004	08:57	4.26	13.74	
M015	1/13/2004	08:06	5.14	12.66	
M019	1/13/2004	08:11	4.78	13.22	
M023	1/13/2004	08:51	7.01	12.46	
M024	1/13/2004	08:53	5.16	12.64	
M025	1/13/2004	08:04	4.63	11.67	
M028	1/13/2004	08:18	4.32	13.88	
M035	1/13/2004	07:51	5.70	13.10	
M036	1/13/2004	07:56	6.03	13.27	
M049	1/13/2004	08:20	4.12	13.68	
M053	1/13/2004	08:08	4.61	12.59	
M054	1/13/2004	08:54	4.49	13.21	
M18D	1/13/2004	08:10	4.76	12.94	
M22D	1/13/2004	08:12	4.46	13.34	
M38D	1/13/2004	07:45	7.05	11.45	
M40D	1/13/2004	07:53	6.24	13.16	
M40S	1/13/2004	07:54	6.00	13.20	
M41D	1/13/2004	07:48	6.41	12.69	
MWL1	1/13/2004	08:42	4.98	13.26	
MWL2	1/13/2004	08:41	4.36	13.41	
MWL3	1/13/2004	08:37	4.18	13.52	
MWL4	1/13/2004	08:29	4.03	13.71	
MWL5	1/13/2004	08:25	4.86	13.71	
TE01	1/13/2004	09:10	3.98	14.12	

<sup>a</sup>Water level flags: D=Dry, F=Flowing

*Table 2. Field Measurements of Samples Collected at the 4.5 Acre Site*

<b>Location</b>	<b>Screen Depth (ft bbls)</b>	<b>Temperature (°C)</b>	<b>Specific Conductance (μmhos/cm)<sup>a</sup></b>	<b>Turbidity (NTU)</b>	<b>pH</b>	<b>Oxidation Reduction Potential (mV)</b>	<b>Dissolved Oxygen (mg/L)</b>	
<b>PIN20</b>		<b>4.5 Acre Site</b>						
0502	21.2–31.2	24.07	1,145	38.6	6.83	-82	0.3	
0503	13.2–23.2	23.9	1,650	21.2	6.83	-77	0.35	
M001	20–25	24.35	1,074	2.89	6.82	-81	0.33	
M011	23.7–28.7	23.94	822	4.49	6.91	-100	0.55	
M012	8.6–13.6	21.95	832	8.23	6.89	-19.3	0.81	
M015	20.8–25.8	24.16	681	2.7	6.94	-98.9	0.57	
M019	22–27	23.85	1,199	4.24	6.7	-39.6	0.38	
M023	19.8–24.8	24.01	677	10.1	7.08	-77.9	0.37	
M024	8.7–13.7	22.8	694	16	7.05	-21.8	0.65	
M025	8.6–13.6	23.28	2,742	16.6	6.7	-59.7	0.37	
M035	9–14	21.86	2,412	7.17	6.79	-38	0.52	
M036	25–30	23.77	810	1.9	6.91	-104	0.33	
M049	20–30	23.99	995	17.4	6.84	-107.2	0.37	
M053	20–30	23.95	843	91.1	6.95	-79	0.35	
M054	20–30	23.53	1,067	58.4	6.9	-137.1	0.35	
M18D	20–30	24.05	1,189	7.21	6.95	-95.3	0.72	
M22D	20–30	24.06	1,441	2.76	6.91	-114.1	0.35	
M38D	20–30	22.94	801	1.42	7	-53	1.1	
M40D	18–28	23.81	779	17.7	7.03	-95.9	0.48	
M40S	4–14	21.45	231	102	6.53	123.6	0.89	
M41D	16–26	23.53	1,797	9.2	6.79	-67	0.22	
MWL1	21–26	23.55	2,400	16.9	6.63	-68	0.62	
MWL2	21–26	22.98	967	2.58	6.88	-82	0.48	
MWL3	21–26	22.89	2,162	5.75	6.57	-58	0.52	
MWL4	20.8–25.8	22.48	803	5.86	6.8	-70	0.51	
MWL5	20.8–25.8	22.1	832	7.3	6.81	-75	0.64	
MWL6	21.5–26.5	22.94	900	19.6	6.8	-77	0.47	

<sup>a</sup>Temperature corrected to 25°C

**Table 3. COPC Concentrations from Wells at the 4.5 Acre Site  
(reported in micrograms per liter)**

Location	Screen Depth (ft)	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	Total 1,2-DCE <sup>b</sup>	Vinyl chloride	Benzene	Total COPC <sup>c</sup>
		<b>FDEP MCL</b>	<b>3</b>	<b>70</b>	<b>100</b>	<b>63</b>	<b>1</b>	<b>1</b>	
		<b>PIN05</b>					<b>Trench Site</b>		
0500	2.5–12.5	4/15/2003	<2.5	<2.5	<2.5	ND	<2.5	<2.5	ND
		<b>PIN20</b>					<b>4.5 Acre Site</b>		
0502	21.2–31.2	1/7/2003	<1	23	0.32J	23	66	<1	89
		4/7/2003	0.27J	41	0.29J	41	110	0.18J	151
		7/16/2003	<2.5	61	<2.5	61	110	<2.5	171
		10/7/2003	<2.5	73	<2.5	73	110	<2.5	183
		1/14/2004	<0.5	154	1.3	155.3	162	<0.5	317.3
0503	13.2–23.2	1/7/2003	<1	<1	<1	ND	<1	<1	ND
		4/7/2003	<1	<1	<1	ND	<1	<1	ND
		7/16/2003	<1	<1	<1	ND	<1	<1	ND
		10/7/2003	<1	<1	<1	ND	<1	<1	ND
		1/14/2004	<5	<5	<5	ND	<5	<5	ND
M001	20–25	1/8/2003	<1	0.55J	<1	0.55J	17	0.69J	17
		4/8/2003	<5	93	0.97J	93	230	<5	323
		7/18/2003	<5	210	6.8	216.8	410	1.7J	626.8
		10/8/2003	<5	320	6.6	326.6	490	<5	816.6
		1/14/2004	<25	496	<25	496	748	<25	1,244
M003	9–14	4/7/2003	<1	<1	<1	ND	<1	<1	ND
M005	25.8–30.7	4/7/2003	<1	<1	<1	ND	<1	<1	ND
M007	25.3–30.3	4/7/2003	<1	<1	<1	ND	<1	<1	ND
M011	23.7–28.7	1/8/2003	<1	<1	<1	ND	<1	<1	ND
		4/7/2003	<1	<1	<1	ND	<1	<1	ND
		7/18/2003	<1	<1	<1	ND	<1	<1	ND
		10/9/2003	<1	<1	<1	ND	<1	<1	ND
		1/14/2004	<0.5	<0.5	<0.5	ND	<0.5	<0.5	ND
M012	8.6–13.6	1/8/2003	<1	<1	<1	ND	<1	<1	ND
		4/7/2003	<1	<1	<1	ND	<1	<1	ND
		7/18/2003	<1	<1	<1	ND	<1	<1	ND
		10/9/2003	<1	<1	<1	ND	<1	<1	ND
		1/14/2004	<0.5	<0.5	<0.5	ND	<0.5	<0.5	ND
M015	20.8–25.8	1/7/2003	<1	<1	<1	ND	0.69J	<1	ND
		4/8/2003	<1	<1	<1	ND	1.1	<1	1.1
		7/18/2003	<1	<1	<1	ND	0.61J	<1	ND
		10/9/2003	<1	<1	<1	ND	0.47J	<1	ND
		1/14/2004	<5	<5	<5	ND	<5	<5	ND

*Table 3 (continued). COPC Concentrations from Wells at the 4.5 Acre Site  
(reported in micrograms per liter)*

Location	Screen Depth (ft)	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	Total 1,2-DCE <sup>b</sup>	Vinyl chloride	Benzene	Total COPC <sup>c</sup>
	<b>FDEP MCL</b>		<b>3</b>	<b>70</b>	<b>100</b>	<b>63</b>	<b>1</b>	<b>1</b>	
M019	22–27	1/8/2003	<1	<1	<1	ND	<1	<1	ND
		4/7/2003	<1	<1	<1	ND	0.29J	<1	ND
		7/16/2003	<1	<1	<1	ND	1.2	<1	1.2
		10/8/2003	<1	<1	<1	ND	1.6	<1	1.6
		1/14/2004	<0.5	<0.5	<0.5	ND	3.4	<0.5	3.4
M023	19.8–24.8	1/7/2003	<1	<1	<1	ND	<1	<1	ND
		4/7/2003	<1	<1	<1	ND	<1	<1	ND
		7/16/2003	<1	<1	<1	ND	<1	<1	ND
		10/7/2003	<1	<1	<1	ND	<1	<1	ND
		1/14/2004	<0.5	<0.5	<0.5	ND	<0.5	<0.5	ND
M024	8.7–13.7	1/7/2003	<1	<1	<1	ND	<1	<1	ND
		4/7/2003	<1	<1	<1	ND	<1	<1	ND
		7/16/2003	<1	<1	<1	ND	<1	<1	ND
		10/7/2003	<1	<1	<1	ND	<1	<1	ND
		1/14/2004	<0.5	<0.5	<0.5	ND	<0.5	<0.5	ND
M025	8.6–13.6	1/7/2003	<1	<1	<1	ND	<1	0.18J	ND
		4/8/2003	<1	<1	<1	ND	<1	<1	ND
		7/18/2003	<1	<1	<1	ND	<1	<1	ND
		10/7/2003	<1	<1	<1	ND	<1	<1	ND
		1/14/2004	<0.5	<0.5	<0.5	ND	<0.5	<0.5	ND
M028	22–27	4/7/2003	<1	<1	<1	ND	<1	<1	ND
M035	9–14	1/8/2003	<1	<1	<1	ND	<1	<1	ND
		4/8/2003	<1	<1	<1	ND	<1	<1	ND
		7/17/2003	<1	<1	<1	ND	<1	<1	ND
		10/10/2003	<1	<1	<1	ND	<1	<1	ND
		1/15/2004	<5	<5	<5	ND	<5	<5	ND
M036	25–30	1/8/2003	<1	<1	<1	ND	<1	<1	ND
		4/8/2003	<1	<1	<1	ND	<1	<1	ND
		7/17/2003	<1	<1	<1	ND	<1	<1	ND
		10/10/2003	<1	<1	<1	ND	<1	<1	ND
		1/15/2004	<0.5	<0.5	<0.5	ND	<0.5	<0.5	ND
M049	20–30	1/8/2003	3.6	62	5.6	67.6	6.9	<2.5	78.1
		4/8/2003	1.7J	54	4.6	58.6	16	<2.5	74.6
		7/17/2003	<1	28	1.4	29.4	3.5	<1	32.9
		10/8/2003	<1	24	<1	24	7.9	<1	31.9
		1/14/2004	<0.5	17.2	1.1	18.3	5.9	<0.5	24.2
M053	20–30	1/7/2003	<1	<1	<1	ND	2	<1	2
		4/7/2003	<1	<1	<1	ND	3.3	<1	3.3
		7/16/2003	<1	<1	<1	ND	2.6	<1	2.6
		10/8/2003	<1	<1	<1	ND	2.7	<1	2.7
		1/14/2004	<5	<5	<5	ND	<5	<5	ND

*Table 3 (continued). COPC Concentrations from Wells at the 4.5 Acre Site  
(reported in micrograms per liter)*

Location	Screen Depth (ft)	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	Total 1,2-DCE <sup>b</sup>	Vinyl chloride	Benzene	Total COPC <sup>c</sup>
		FDEP MCL	3	70	100	63	1	1	
M054	20–30	1/7/2003	<1	<1	<1	ND	<1	<1	ND
		4/7/2003	<1	<1	<1	ND	<1	<1	ND
		7/16/2003	<1	<1	<1	ND	<1	<1	ND
		10/8/2003	<1	<1	<1	ND	<1	<1	ND
		1/14/2004	<2.5	<2.5	<2.5	ND	<2.5	<2.5	ND
M18D	20–30	1/7/2003	<1	1	<1	1	2.4	<1	3.4
		4/8/2003	<1	1.6	<1	1.6	4.9	<1	6.5
		7/16/2003	<1	3.2	<1	3.2	2.7	<1	5.9
		10/8/2003	<1	5.2	<1	5.2	3.8	<1	9
		1/14/2004	<0.5	10.2	<0.5	10.2	4.6	<0.5	14.8
M22D	20–30	1/7/2003	<1	<1	<1	ND	1.8	<1	1.8
		4/7/2003	<1	<1	<1	ND	8	<1	8
		7/18/2003	<1	<1	<1	ND	24	<1	24
		10/8/2003	<1	<1	<1	ND	7.3	<1	7.3
		1/14/2004	<0.5	<0.5	<0.5	ND	2.3	<0.5	2.3
M38D	20–30	4/8/2003	<1	<1	<1	ND	<1	<1	ND
		7/17/2003	<1	<1	<1	ND	<1	<1	ND
		10/9/2003	<1	<1	<1	ND	<1	<1	ND
		1/15/2004	<5	<5	<5	ND	<5	<5	ND
M40D	18–28	4/8/2003	<1	<1	<1	ND	<1	<1	ND
		7/17/2003	<1	<1	<1	ND	<1	<1	ND
		10/9/2003	<1	<1	<1	ND	<1	<1	ND
		1/15/2004	<0.5	<0.5	<0.5	ND	<0.5	<0.5	ND
M40S	4–14	4/8/2003	<1	<1	<1	ND	<1	<1	ND
		7/17/2003	<1	<1	<1	ND	<1	<1	ND
		10/10/2003	<1	<1	<1	ND	<1	<1	ND
		1/15/2004	<0.5	<0.5	<0.5	ND	<0.5	<0.5	ND
M41D	16–26	4/9/2003	<1	<1	<1	ND	<1	<1	ND
		7/18/2003	<1	<1	<1	ND	<1	<1	ND
		10/9/2003	<1	<1	<1	ND	<1	<1	ND
		1/15/2004	<5	<5	<5	ND	<5	<5	ND
MWL1	21–26	1/8/2003	0.26J	1.5	<1	1.5	4.4	7	12.9
		4/8/2003	<1	0.3J	<1	0.3J	6.1	5.3	11.4
		7/17/2003	<1	<1	<1	ND	3.6	6.7	10.3
		10/9/2003	<1	<1	<1	ND	4.1	6.8	10.9
		1/14/2004	<25	<25	<25	ND	<25	<25	ND
MWL2	21–26	1/8/2003	0.89J	4.6	0.57J	4.6	18	1.6	24.2
		4/8/2003	<1	0.9J	0.21J	1.11J	25	1.4	26.4
		7/17/2003	<1	2	0.8J	2	41	1.4	44.4
		10/9/2003	<1	9.5	4.2	13.7	82	2.9	98.6
		1/14/2004	<10	14J	<10	14J	120	<10	120

*Table 3 (continued). COPC Concentrations from Wells at the 4.5 Acre Site  
(reported in micrograms per liter)*

Location	Screen Depth (ft)	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	Total 1,2-DCE <sup>b</sup>	Vinyl chloride	Benzene	Total COPC <sup>c</sup>
	<b>FDEP MCL</b>		<b>3</b>	<b>70</b>	<b>100</b>	<b>63</b>	<b>1</b>	<b>1</b>	
MWL3	21–26	1/8/2003	2.5	11	0.4J	11	14	<1	27.5
		4/8/2003	<1	0.27J	<1	0.27J	3.8	0.15J	3.8
		7/17/2003	<10	<10	<10	ND	640	<10	640
		10/9/2003	<10	<10	<10	ND	680	<10	680
		1/14/2004	<5	<5	<5	ND	<5	<5	ND
MWL4	20.8–25.8	1/8/2003	49J	5,400	<100	5,400	570	<100	5,970
		4/8/2003	240	8,200	140	8,340	1,700	<100	10,280
		7/17/2003	110	4,000	43J	4,000	870	<50	4,980
		10/9/2003	<50	2,600	13J	2,600	660	<50	3,260
		1/14/2004	<10	993	17.9J	993	347	<10	1,340
MWL5	20.8–25.8	1/8/2003	<1	<1	<1	ND	<1	<1	ND
		4/8/2003	<1	1.3	<1	1.3	<1	0.19J	1.3
		7/17/2003	<1	<1	<1	ND	<1	<1	ND
		10/8/2003	<1	<1	<1	ND	<1	<1	ND
		1/14/2004	<5	<5	<5	ND	<5	<5	ND
MWL6	21.5–26.5	1/8/2003	<1	<1	<1	ND	<1	<1	ND
		4/8/2003	<1	0.25J	<1	0.25J	<1	0.2J	ND
		7/17/2003	<1	<1	<1	ND	<1	<1	ND
		10/10/2003	<1	<1	<1	ND	<1	<1	ND
		1/14/2004	<5	<5	<5	ND	<5	<5	ND

<sup>a</sup>Before December 18, 2003, "<" values are reporting limits. On or after December 18, 2003, "<" values are method detection limits.

<sup>b</sup>Total 1,2-DCE is the sum of cis-1,2-DCE and trans-1,2-DCE.

<sup>c</sup>Total COPC is the sum of the individual COPC concentrations. The cis-1,2-DCE and trans-1,2-DCE values are not part of the total COPC value because these values are included in the total 1,2-DCE value. "J" values are not included in the total COPC value.

ND = Not detected.

J = Estimated value, result is between the reporting limit and the method detection limit.

*Table 4. RPD for Duplicate Samples, 4.5 Acre Site*

<b>Sample ID</b>	<b>Duplicate ID</b>	<b>Case Number</b>	<b>Constituent</b>	<b>S<sup>a</sup></b>	<b>D<sup>b</sup></b>	<b>RPD Value</b>	<b>5 times DL<sup>c</sup></b>	<b>Fail<sup>d</sup></b>
PIN20-0502	PIN20-0550	F21629	1,1-Dichloroethene	1.2	2.5	70.3	2.5	
			cis-1,2-Dichloroethene	154	168	8.7	25	
			trans-1,2-Dichloroethene	1.3	2.5	63.2	2.5	
			Vinyl chloride	162	186	13.8	25	
PIN20-MWL2	PIN20-0551	F21629	cis-1,2-Dichloroethene	14	16.8	18.2	25	
			trans-1,2-Dichloroethene	5	8.6	52.9	25	
			Vinyl chloride	120	125	4.1	25	

<sup>a</sup>S = Original sample (N001), VOC concentration in µg/L.<sup>b</sup>D = Duplicate sample (N002), VOC concentration in µg/L.<sup>c</sup>DL = Detection limit.<sup>d</sup>Fail is an RPD greater than " 30% and an original or duplicate sample more than 5 times the detection limit.

End of current text

## **Appendix A**

### **Laboratory Reports—January 2004 Quarterly Results**



03/31/04

## Technical Report for

**S M Stoller**

**Quarterly Sampling, STAR Center, Largo, FL**

**110406202**

**Accutest Job Number: F21629**

### Report to:

**S M Stoller**

**Cathy.Kelleher@gjo.doe.gov**

**ATTN: Cathy Kelleher**

**Total number of pages in report: 97**



Test results contained within this data package meet the requirements  
of the National Environmental Laboratory Accreditation Conference  
and/or state specific certification programs as applicable.



**Harry Behzadi, Ph.D.  
Laboratory Director**

**Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK**  
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## Sample Summary

S M Stoller

**Job No:** F21629

Quarterly Sampling, STAR Center, Largo, FL  
 Project No: 110406202

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID	
F21629-1	01/14/04	08:25 PLG	01/15/04	AQ	Ground Water	PIN20-M023
F21629-2	01/14/04	08:50 PLG	01/15/04	AQ	Ground Water	PIN20-M024
F21629-3	01/14/04	09:30 PLG	01/15/04	AQ	Ground Water	PIN20-M054
F21629-4	01/14/04	09:55 PLG	01/15/04	AQ	Ground Water	PIN20-M011
F21629-5	01/14/04	10:20 PLG	01/15/04	AQ	Ground Water	PIN20-M012
F21629-6	01/14/04	10:45 PLG	01/15/04	AQ	Ground Water	PIN20-M22D
F21629-7	01/14/04	11:25 PLG	01/15/04	AQ	Ground Water	PIN20-M019
F21629-8	01/14/04	13:00 PLG	01/15/04	AQ	Ground Water	PIN20-M18D
F21629-9	01/14/04	13:35 PLG	01/15/04	AQ	Ground Water	PIN20-M015
F21629-10	01/14/04	14:15 PLG	01/15/04	AQ	Ground Water	PIN20-M025
F21629-11	01/14/04	14:40 PLG	01/15/04	AQ	Ground Water	PIN20-M049
F21629-12	01/14/04	00:00 PLG	01/15/04	AQ	Ground Water	PIN20-0552
F21629-13	01/15/04	07:25 PLG	01/15/04	AQ	Ground Water	PIN20-M036

## Sample Summary

(continued)

S M Stoller

**Job No:** F21629

Quarterly Sampling, STAR Center, Largo, FL  
 Project No: 110406202

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID	
F21629-14	01/15/04	07:50 PLG	01/15/04	AQ	Ground Water	PIN20-M40S
F21629-15	01/15/04	08:10 PLG	01/15/04	AQ	Ground Water	PIN20-M40D
F21629-16	01/14/04	08:25 PLG	01/15/04	AQ	Ground Water	PIN20-0553
F21629-17	01/14/04	08:47 PLG	01/15/04	AQ	Ground Water	PIN20-0502
F21629-18	01/14/04	09:00 PLG	01/15/04	AQ	Ground Water	PIN20-0550
F21629-19	01/14/04	09:22 PLG	01/15/04	AQ	Ground Water	PIN20-0503
F21629-20	01/14/04	10:11 PLG	01/15/04	AQ	Ground Water	PIN20-M001
F21629-21	01/14/04	10:45 PLG	01/15/04	AQ	Ground Water	PIN20-M053
F21629-22	01/14/04	13:05 PLG	01/15/04	AQ	Ground Water	PIN20-MWL1
F21629-23	01/14/04	13:40 PLG	01/15/04	AQ	Ground Water	PIN20-MWL2
F21629-24	01/14/04	13:50 PLG	01/15/04	AQ	Ground Water	PIN20-0551
F21629-25	01/14/04	14:05 PLG	01/15/04	AQ	Ground Water	PIN20-MWL3
F21629-26	01/14/04	14:30 PLG	01/15/04	AQ	Ground Water	PIN20-MWL4

## Sample Summary

(continued)

S M Stoller

Job No: F21629

Quarterly Sampling, STAR Center, Largo, FL  
Project No: 110406202

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID	
F21629-27	01/14/04	15:00	PLG	01/15/04	AQ	Ground Water	PIN20-MWL5
F21629-28	01/14/04	15:55	PLG	01/15/04	AQ	Ground Water	PIN20-MWL6
F21629-29	01/15/04	07:30	PLG	01/15/04	AQ	Ground Water	PIN20-M035
F21629-30	01/15/04	07:50	PLG	01/15/04	AQ	Ground Water	PIN20-M38D
F21629-31	01/15/04	08:15	PLG	01/15/04	AQ	Ground Water	PIN20-M41D

**Accutest Laboratories Southeast, Inc.**  
**Analytical Narrative**

Client: S M Stoller  
Site: Quarterly Sampling, STAR Center, Largo FL  
Job No.: F21629  
Report Date: January 30, 2004

31 samples were collected on January 14 and 15, 2004 and received on January 15, 2004. Samples were intact and properly cooled. A listing of the Laboratory Sample ID, Client Sample ID, and dates of collection are presented in the Results Summary section of this report.

**Samples PIN20-M38D and PIN-M41D had no analysis selected on the chain of custody. The samples were logged in per the vials received**

All method specified holding times, calibrations and quality control performance criteria were met, with the following notes:

**VOCs, SW846 8021B:**

- Sample PIN20-M054 (F21629-3) required a 5X dilution due to foaming. Data has been footnoted accordingly.
- Samples PIN20-M015 (F21629-9), PIN20-0503 (F21629-19), PIN20-M053 (F21629-21), PIN20-0551 (f21629-24), PIN20-MW L3 (F21629-25), PIN20-MWL5 (F21629-27), PIN20-MWL6 (F21629-28), PIN20-M38D (F21629-308), PIN20-M41D (F21629-31) required a 10X dilution due to foaming. Data has been footnoted accordingly.
- Sample PIN20-MWL1 (F21629-22) required a 50X dilution due to foaming. Data has been footnoted accordingly.
- Sample PIN20-MWL2 (F21629-23) required a 20X dilution due to foaming. Data has been footnoted accordingly.
- Sample PIN20-M035 (F21629-29) required a 10X dilution due to foaming. One surrogate in this sample had a recovery above acceptance limits due to matrix interference. Data has been footnoted accordingly.
- The MS/MSD associated with analytical batch GQR863 had one RPD above acceptance limits. The Blank Spike was within limits. Data not adversely affected.
- The MS/MSD associated with analytical batch GQR866 had various recoveries and RPDs below and/or above acceptance limits. Some recoveries were below acceptance limits due to a high level of this compound detected in the native sample relative to the spike amount. The Blank Spike was within limits. Data not adversely affected.
- The MS/MSD associated with analytical batch GQR867 had various recoveries and RPDs below and/or above acceptance limits. The Blank Spike was within limits. Data not adversely affected.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other than conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

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Sue O. Bell, Project Manager (signature on file)

Date: January 30, 2004

**Report of Analysis**

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**Client Sample ID:** PIN20-M023  
**Lab Sample ID:** F21629-1  
**Matrix:** AQ - Ground Water  
**Method:** SW846 8021B  
**Project:** Quarterly Sampling, STAR Center, Largo, FL

**Date Sampled:** 01/14/04  
**Date Received:** 01/15/04  
**Percent Solids:** n/a

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020358.D	1	01/19/04	RA	n/a	n/a	GQR863
Run #2							

**Purge Volume**  
Run #1 5.0 ml  
Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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**Client Sample ID:** PIN20-M023**Lab Sample ID:** F21629-1**Date Sampled:** 01/14/04**Matrix:** AQ - Ground Water**Date Received:** 01/15/04**Method:** SW846 8021B**Percent Solids:** n/a**Project:** Quarterly Sampling, STAR Center, Largo, FL**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	104%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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<b>Client Sample ID:</b>	PIN20-M024	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-2	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020361.D	1	01/19/04	RA	n/a	n/a	GQR863
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M024	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-2	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	101%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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3**Client Sample ID:** PIN20-M054**Lab Sample ID:** F21629-3**Date Sampled:** 01/14/04**Matrix:** AQ - Ground Water**Date Received:** 01/15/04**Method:** SW846 8021B**Percent Solids:** n/a**Project:** Quarterly Sampling, STAR Center, Largo, FL

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020434.D	5	01/22/04	RA	n/a	n/a	GQR866
Run #2							

**Purge Volume**

Run #1 5.0 ml

Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	5.0	2.5	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.5	ug/l	
75-25-2	Bromoform	ND	5.0	2.5	ug/l	
74-83-9	Bromomethane	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	2.5	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	5.0	2.5	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.5	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.5	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	2.5	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	2.5	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
100-41-4	Ethylbenzene	ND	5.0	2.5	ug/l	
75-09-2	Methylene chloride	ND	25	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	2.5	ug/l	
108-88-3	Toluene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.5	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.5	ug/l	

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M054	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-3	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	5.0	2.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	2.5	ug/l	
95-47-6	o-Xylene	ND	5.0	2.5	ug/l	
	m,p-Xylene	ND	10	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	104%		70-123%
563-58-6	1,1-Dichloropropene	100%		86-112%
563-58-6	1,1-Dichloropropene	110%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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3**Client Sample ID:** PIN20-M011**Lab Sample ID:** F21629-4**Date Sampled:** 01/14/04**Matrix:** AQ - Ground Water**Date Received:** 01/15/04**Method:** SW846 8021B**Percent Solids:** n/a**Project:** Quarterly Sampling, STAR Center, Largo, FL

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020364.D	1	01/19/04	RA	n/a	n/a	GQR863
Run #2							

**Purge Volume**

Run #1 5.0 ml

Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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<b>Client Sample ID:</b>	PIN20-M011	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-4	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	100%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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3**Client Sample ID:** PIN20-M012**Lab Sample ID:** F21629-5**Date Sampled:** 01/14/04**Matrix:** AQ - Ground Water**Date Received:** 01/15/04**Method:** SW846 8021B**Percent Solids:** n/a**Project:** Quarterly Sampling, STAR Center, Largo, FL

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020365.D	1	01/19/04	RA	n/a	n/a	GQR863
Run #2							

**Purge Volume**

Run #1 5.0 ml

Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M012	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-5	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	103%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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3.6  
3**Client Sample ID:** PIN20-M22D**Lab Sample ID:** F21629-6**Date Sampled:** 01/14/04**Matrix:** AQ - Ground Water**Date Received:** 01/15/04**Method:** SW846 8021B**Percent Solids:** n/a**Project:** Quarterly Sampling, STAR Center, Largo, FL

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020366.D	1	01/19/04	RA	n/a	n/a	GQR863
Run #2							

**Purge Volume**

Run #1 5.0 ml

Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M22D	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-6	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	2.3	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%
563-58-6	1,1-Dichloropropene	102%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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3**Client Sample ID:** PIN20-M019**Lab Sample ID:** F21629-7**Date Sampled:** 01/14/04**Matrix:** AQ - Ground Water**Date Received:** 01/15/04**Method:** SW846 8021B**Percent Solids:** n/a**Project:** Quarterly Sampling, STAR Center, Largo, FL

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020367.D	1	01/19/04	RA	n/a	n/a	GQR863
Run #2							

**Purge Volume**

Run #1 5.0 ml

Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M019	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-7	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	3.4	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	100%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	109%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M18D	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-8	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020368.D	1	01/19/04	RA	n/a	n/a	GQR863
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	10.2	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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**Client Sample ID:** PIN20-M18D**Lab Sample ID:** F21629-8**Matrix:** AQ - Ground Water**Method:** SW846 8021B**Project:** Quarterly Sampling, STAR Center, Largo, FL**Date Sampled:** 01/14/04**Date Received:** 01/15/04**Percent Solids:** n/a**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	4.6	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	99%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	105%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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3**Client Sample ID:** PIN20-M015**Lab Sample ID:** F21629-9**Date Sampled:** 01/14/04**Matrix:** AQ - Ground Water**Date Received:** 01/15/04**Method:** SW846 8021B**Percent Solids:** n/a**Project:** Quarterly Sampling, STAR Center, Largo, FL

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020439.D	10	01/22/04	RA	n/a	n/a	GQR866
Run #2							

**Purge Volume**

Run #1 5.0 ml

Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M015	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-9	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	103%		70-123%
563-58-6	1,1-Dichloropropene	100%		86-112%
563-58-6	1,1-Dichloropropene	110%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M025	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-10	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020370.D	1	01/20/04	RA	n/a	n/a	GQR863
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M025	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-10	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	102%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M049	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-11	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020371.D	1	01/20/04	RA	n/a	n/a	GQR863
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	17.2	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.1	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M049	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-11	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	5.9	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	98%		86-112%

(a) All hits confirmed by GC/MS.

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0552	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-12	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020372.D	1	01/20/04	RA	n/a	n/a	GQR863
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0552	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-12	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	102%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M036	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-13	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020374.D	1	01/20/04	RA	n/a	n/a	GQR863
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M036	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-13	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	102%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M40S	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-14	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020375.D	1	01/20/04	RA	n/a	n/a	GQR863
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M40S	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-14	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	98%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	104%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M40D	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-15	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020376.D	1	01/20/04	RA	n/a	n/a	GQR863
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M40D	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-15	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	105%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0553	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-16	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020377.D	1	01/20/04	RA	n/a	n/a	GQR863
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene <sup>b</sup>	ND	4.0	4.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	1.7	5.0	1.0	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.91	1.0	0.50	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0553	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-16	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%
563-58-6	1,1-Dichloropropene	100%		86-112%

- (a) Confirmed by GC/MS  
 (b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0502	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-17	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020378.D	1	01/20/04	RA	n/a	n/a	GQR863
Run #2	QR020436.D	10	01/22/04	RA	n/a	n/a	GQR866

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	5.0 ml

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	1.2	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	154 <sup>a</sup>	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.3	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0502	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-17	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	162 <sup>a</sup>	10	5.0	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%	93%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	87%	94%	70-123%
563-58-6	1,1-Dichloropropene	98%	100%	86-112%
563-58-6	1,1-Dichloropropene	92%	99%	86-112%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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**Client Sample ID:** PIN20-0550  
**Lab Sample ID:** F21629-18  
**Matrix:** AQ - Ground Water  
**Method:** SW846 8021B  
**Project:** Quarterly Sampling, STAR Center, Largo, FL

**Date Sampled:** 01/14/04**Date Received:** 01/15/04**Percent Solids:** n/a

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020525.D	10	01/26/04	RA	n/a	n/a	GQR869
Run #2							

**Purge Volume**

Run #1 5.0 ml  
 Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	168	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0550	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-18	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	186	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
563-58-6	1,1-Dichloropropene	100%		86-112%
563-58-6	1,1-Dichloropropene	104%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0503	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-19	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020445.D	10	01/22/04	RA	n/a	n/a	GQR866
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0503	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-19	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	103%		70-123%
563-58-6	1,1-Dichloropropene	100%		86-112%
563-58-6	1,1-Dichloropropene	112%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M001	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-20	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020449.D	50	01/22/04	RA	n/a	n/a	GQR866
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	50	25	ug/l	
75-27-4	Bromodichloromethane	ND	50	25	ug/l	
75-25-2	Bromoform	ND	50	25	ug/l	
74-83-9	Bromomethane	ND	50	25	ug/l	
56-23-5	Carbon tetrachloride	ND	50	25	ug/l	
108-90-7	Chlorobenzene	ND	50	25	ug/l	
124-48-1	Dibromochloromethane	ND	50	20	ug/l	
75-00-3	Chloroethane	ND	50	25	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	50	25	ug/l	
67-66-3	Chloroform	ND	50	25	ug/l	
74-87-3	Chloromethane	ND	50	25	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	50	25	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	50	25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	25	ug/l	
75-71-8	Dichlorodifluoromethane	ND	50	25	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	25	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	25	ug/l	
75-35-4	1,1-Dichloroethene	ND	50	25	ug/l	
156-59-2	cis-1,2-Dichloroethene	496	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	50	25	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	15	ug/l	
100-41-4	Ethylbenzene	ND	50	25	ug/l	
75-09-2	Methylene chloride	ND	250	50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	50	25	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	10	ug/l	
127-18-4	Tetrachloroethene	ND	50	25	ug/l	
108-88-3	Toluene	ND	50	25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	25	ug/l	
79-01-6	Trichloroethene	ND	50	25	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M001	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-20	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	50	25	ug/l	
75-01-4	Vinyl chloride	748	50	25	ug/l	
95-47-6	o-Xylene	ND	50	25	ug/l	
	m,p-Xylene	ND	100	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
563-58-6	1,1-Dichloropropene	100%		86-112%
563-58-6	1,1-Dichloropropene	101%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M053	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-21	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020437.D	10	01/22/04	RA	n/a	n/a	GQR866
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M053	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-21	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	105%		70-123%
563-58-6	1,1-Dichloropropene	100%		86-112%
563-58-6	1,1-Dichloropropene	112%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-MWL1	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-22	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020476.D	50	01/23/04	RA	n/a	n/a	GQR867
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	50	25	ug/l	
75-27-4	Bromodichloromethane	ND	50	25	ug/l	
75-25-2	Bromoform	ND	50	25	ug/l	
74-83-9	Bromomethane	ND	50	25	ug/l	
56-23-5	Carbon tetrachloride	ND	50	25	ug/l	
108-90-7	Chlorobenzene	ND	50	25	ug/l	
124-48-1	Dibromochloromethane	ND	50	20	ug/l	
75-00-3	Chloroethane	ND	50	25	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	50	25	ug/l	
67-66-3	Chloroform	ND	50	25	ug/l	
74-87-3	Chloromethane	ND	50	25	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	50	25	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	50	25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	25	ug/l	
75-71-8	Dichlorodifluoromethane	ND	50	25	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	25	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	25	ug/l	
75-35-4	1,1-Dichloroethene	ND	50	25	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	50	25	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	15	ug/l	
100-41-4	Ethylbenzene	ND	50	25	ug/l	
75-09-2	Methylene chloride	ND	250	50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	50	25	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	10	ug/l	
127-18-4	Tetrachloroethene	ND	50	25	ug/l	
108-88-3	Toluene	ND	50	25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	25	ug/l	
79-01-6	Trichloroethene	ND	50	25	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-MWL1	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-22	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	50	25	ug/l	
75-01-4	Vinyl chloride	ND	50	25	ug/l	
95-47-6	o-Xylene	ND	50	25	ug/l	
	m,p-Xylene	ND	100	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	99%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%
563-58-6	1,1-Dichloropropene	109%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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**Client Sample ID:** PIN20-MWL2  
**Lab Sample ID:** F21629-23  
**Matrix:** AQ - Ground Water  
**Method:** SW846 8021B  
**Project:** Quarterly Sampling, STAR Center, Largo, FL

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020478.D	20	01/23/04	RA	n/a	n/a	GQR867
Run #2							

**Purge Volume**  
Run #1 5.0 ml  
Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	20	10	ug/l	
75-27-4	Bromodichloromethane	ND	20	10	ug/l	
75-25-2	Bromoform	ND	20	10	ug/l	
74-83-9	Bromomethane	ND	20	10	ug/l	
56-23-5	Carbon tetrachloride	ND	20	10	ug/l	
108-90-7	Chlorobenzene	ND	20	10	ug/l	
124-48-1	Dibromochloromethane	ND	20	8.0	ug/l	
75-00-3	Chloroethane	ND	20	10	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	20	10	ug/l	
67-66-3	Chloroform	ND	20	10	ug/l	
74-87-3	Chloromethane	ND	20	10	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	10	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	10	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	10	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	10	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	10	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	10	ug/l	
75-35-4	1,1-Dichloroethene	ND	20	10	ug/l	
156-59-2	cis-1,2-Dichloroethene	14.0	20	10	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	20	10	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	6.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	6.0	ug/l	
100-41-4	Ethylbenzene	ND	20	10	ug/l	
75-09-2	Methylene chloride	ND	100	20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	10	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	4.0	ug/l	
127-18-4	Tetrachloroethene	ND	20	10	ug/l	
108-88-3	Toluene	ND	20	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	10	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	10	ug/l	
79-01-6	Trichloroethene	ND	20	10	ug/l	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-MWL2	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-23	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	20	10	ug/l	
75-01-4	Vinyl chloride	120	20	10	ug/l	
95-47-6	o-Xylene	ND	20	10	ug/l	
	m,p-Xylene	ND	40	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	101%		70-123%
563-58-6	1,1-Dichloropropene	99%		86-112%
563-58-6	1,1-Dichloropropene	108%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0551	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-24	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020446.D	10	01/22/04	RA	n/a	n/a	GQR866
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	16.8	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	8.6	10	5.0	ug/l	J
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-0551	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-24	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	125	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	99%		70-123%
563-58-6	1,1-Dichloropropene	100%		86-112%
563-58-6	1,1-Dichloropropene	105%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected MDL - Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-MWL3	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-25	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020444.D	10	01/22/04	RA	n/a	n/a	GQR866
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-MWL3	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-25	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	99%		70-123%
563-58-6	1,1-Dichloropropene	100%		86-112%
563-58-6	1,1-Dichloropropene	106%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-MWL4	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-26	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	QR020448.D	20	01/22/04	RA	n/a	n/a	GQR866
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	20	10	ug/l	
75-27-4	Bromodichloromethane	ND	20	10	ug/l	
75-25-2	Bromoform	ND	20	10	ug/l	
74-83-9	Bromomethane	ND	20	10	ug/l	
56-23-5	Carbon tetrachloride	ND	20	10	ug/l	
108-90-7	Chlorobenzene	ND	20	10	ug/l	
124-48-1	Dibromochloromethane	ND	20	8.0	ug/l	
75-00-3	Chloroethane	ND	20	10	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	20	10	ug/l	
67-66-3	Chloroform	ND	20	10	ug/l	
74-87-3	Chloromethane	ND	20	10	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	10	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	10	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	10	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	10	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	10	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	10	ug/l	
75-35-4	1,1-Dichloroethene	ND	20	10	ug/l	
156-59-2	cis-1,2-Dichloroethene	993	20	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	17.9	20	10	ug/l	J
78-87-5	1,2-Dichloropropane	ND	20	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	6.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	6.0	ug/l	
100-41-4	Ethylbenzene	ND	20	10	ug/l	
75-09-2	Methylene chloride	ND	100	20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	10	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	4.0	ug/l	
127-18-4	Tetrachloroethene	ND	20	10	ug/l	
108-88-3	Toluene	ND	20	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	10	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	10	ug/l	
79-01-6	Trichloroethene	ND	20	10	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-MWL4	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-26	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	20	10	ug/l	
75-01-4	Vinyl chloride	347	20	10	ug/l	
95-47-6	o-Xylene	ND	20	10	ug/l	
	m,p-Xylene	ND	40	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
563-58-6	1,1-Dichloropropene	101%		86-112%
563-58-6	1,1-Dichloropropene	97%		86-112%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 2

<b>Client Sample ID:</b>	PIN20-MWL5	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-27	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020471.D	10	01/23/04	RA	n/a	n/a	GQR867
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 2 of 2

<b>Client Sample ID:</b>	PIN20-MWL5	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-27	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	100%		70-123%
563-58-6	1,1-Dichloropropene	99%		86-112%
563-58-6	1,1-Dichloropropene	111%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 2

**Client Sample ID:** PIN20-MWL6  
**Lab Sample ID:** F21629-28  
**Matrix:** AQ - Ground Water  
**Method:** SW846 8021B  
**Project:** Quarterly Sampling, STAR Center, Largo, FL

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020472.D	10	01/23/04	RA	n/a	n/a	GQR867
Run #2							

**Purge Volume**  
Run #1 5.0 ml  
Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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3

<b>Client Sample ID:</b>	PIN20-MWL6	<b>Date Sampled:</b>	01/14/04
<b>Lab Sample ID:</b>	F21629-28	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	105%		70-123%
563-58-6	1,1-Dichloropropene	99%		86-112%
563-58-6	1,1-Dichloropropene	111%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 2

<b>Client Sample ID:</b>	PIN20-M035	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-29	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020473.D	10	01/23/04	RA	n/a	n/a	GQR867
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-M035	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-29	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	105%		70-123%
563-58-6	1,1-Dichloropropene	99%		86-112%
563-58-6	1,1-Dichloropropene	116% <sup>b</sup>		86-112%

(a) Dilution required due to matrix interference (sample foamed).

(b) Outside control limits due to matrix interference.

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 2

<b>Client Sample ID:</b>	PIN20-M38D	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-30	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020474.D	10	01/23/04	RA	n/a	n/a	GQR867
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 2 of 2

<b>Client Sample ID:</b>	PIN20-M38D	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-30	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	103%		70-123%
563-58-6	1,1-Dichloropropene	99%		86-112%
563-58-6	1,1-Dichloropropene	109%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 2

<b>Client Sample ID:</b>	PIN20-M41D	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-31	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	QR020475.D	10	01/23/04	RA	n/a	n/a	GQR867
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	5.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
74-83-9	Bromomethane	ND	10	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	4.0	ug/l	
75-00-3	Chloroethane	ND	10	5.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	10	5.0	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
75-09-2	Methylene chloride	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.0	ug/l	
79-01-6	Trichloroethene	ND	10	5.0	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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3

<b>Client Sample ID:</b>	PIN20-M41D	<b>Date Sampled:</b>	01/15/04
<b>Lab Sample ID:</b>	F21629-31	<b>Date Received:</b>	01/15/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8021B		
<b>Project:</b>	Quarterly Sampling, STAR Center, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	m,p-Xylene	ND	20	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
352-33-0	1-Chloro-4-fluorobenzene	104%		70-123%
563-58-6	1,1-Dichloropropene	99%		86-112%
563-58-6	1,1-Dichloropropene	111%		86-112%

(a) Dilution required due to matrix interference (sample foamed).

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



## CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811

TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB  
ACCUTEST QU#:

F21629

CLIENT INFORMATION		FACILITY INFORMATION		ANALYTICAL INFORMATION		MATRIX CODES			
NAME: S.M. Stoller ADDRESS: 1597 B 3/4 Rd CITY: Grand Junction, CO ZIP: 81503 SEND REPORT TO: Keith Miller PHONE #: 970-248-6598		PROJECT NAME: STAR Carter LOCATION: Largo, FL PROJECT NO.: 110406202 Onsite Contact: Barry Rose FAX #: 727-549-1121							
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION		MATRIX	# OF BOTTLES	PRESERVATION	DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID		
		DATE	TIME					SAMPLED BY:	NO
1	PIN20-M023	1-14-04	0825	PLG	GW	3	3		3
2	PIN20-M024	1-14-04	0830	JWW		3	3		3
3	PIN20-M054	1-14-04	0930	PLG		3	3		3
4	PIN20-M011	1-14-04	0955	PLG		3	3		3
5	PIN20-M012	1-14-04	1020	PLG		3	3		3
6	PIN20-M27D	1-14-04	1045	PLG		3	3		3
7	PIN20-M019	1-14-04	1125	PLG		3	3		3
8	PIN20-M18D	1-14-04	1300	PLG		3	3		3
9	PIN20-M015	1-14-04	1335	PLG		3	3		3
10	PIN20-M025	1-14-04	1415	PLG		3	3		3
11	PIN20-M049	1-14-04	1440	PLG	V	3	3		3
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		COMMENTS/REMARKS					
<input checked="" type="checkbox"/> STANDARD	APPROVED BY:	<input type="checkbox"/> STANDARD							
<input type="checkbox"/> 48 HOUR RUSH		<input type="checkbox"/> COMMERCIAL "B"							
<input type="checkbox"/> 24 HOUR EMERGENCY		<input type="checkbox"/> DISK DELIVERABLE							
<input type="checkbox"/> OTHER		<input type="checkbox"/> STATE FORMS							
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED									
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY									
RELINQUISHED BY NAME: 1. Kelly X. Bowen	DATE/TIME: 1-15-04 10:15 AM	RECEIVED BY: 1. M. Al. 1/15/04 11:05	RELINQUISHED BY: 2. M. Al. 1/15/04	DATE/TIME: 11:35	RECEIVED BY: 2. Munar Mohammed				
RELINQUISHED BY: 3.	DATE/TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE/TIME:	RECEIVED BY: 4.				
RELINQUISHED BY: 5.	DATE/TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE		ON ICE <input type="checkbox"/>	TEMPERATURE: 3.0 12.2°C		

F21629: Chain of Custody

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# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

ACCUTEST QUOTE #:

F21629

CLIENT INFORMATION			FACILITY INFORMATION			ANALYTICAL INFORMATION			MATRIX CODES		
NAME: S.M. Stoller ADDRESS: 7597 B 3/4 Rd CITY: Grand Junction, CO STATE: ZIP: 81503 SEND REPORT TO: Keith Miller PHONE #: 970-248-6598			PROJECT NAME: STAR Center LOCATION: Largo, FL PROJECT NO.: On site Contractor: Barry Rice FAX #: 727-549-1121						DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID		
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION		COLLECTION		MATRIX	# OF BOTTLES	PRESERVATION		LAB USE ONLY		
			DATE	TIME			SAMPLED BY:	HCl			
12	PIN20-0552		1-14-04	—	PLG	GW	3	3			
13	PIN20-M036		1-15-04	0725	PLG	GW	3	3			
14	PIN20-M405		1-15-04	0750	PLG	GW	3	3			
15	PIN20-M401		1-15-04	0810	PLG	GW	3	3			
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION			COMMENTS/REMARKS					
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER _____			<input type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____								
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED											
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY											
RELINQUISHED BY SAMPLE#	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
1.	1-15-04 11:05	1.	2.	1-15-04 11:05	2.	3.	1-15-04 11:05	3.	4.	1-15-04 11:05	4.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
3.											
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
5.											
			SEAL #	PRESERVE WHERE APPLICABLE			<input type="checkbox"/>	<input type="checkbox"/>	ON ICE	<input type="checkbox"/>	TEMPERATURE °C

F21629: Chain of Custody

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# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

ACCUTEST QUOTE #:

**F21629**

CLIENT INFORMATION		FACILITY INFORMATION			ANALYTICAL INFORMATION			MATRIX CODES		
NAME: S.M. Stoller ADDRESS: 2397 B 3/4 Rd CITY: Grand Junction CO 81503 STATE: ZIP: Keith Miller SEND REPORT TO: Keith Miller PHONE #: 970 248-6598 FAX #: 727 549-1121		PROJECT NAME: STAR Center LOCATION: Largo, FL PROJECT NO.: 1104 06202 Onsite contact Barry Rice						DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID		
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION		COLLECTION		MATRIX: CW *OF BOTTLES: 3 PRESERVATION: HCl, NaOH, Nitro, Person Name: Barry Rice VOC: VOC BOTTLE: BOTTLE				LAB USE ONLY	
	16	PIN20-0553	DATE: 1-14-04	TIME: 0825		SAMPLED BY: AC				
	17	PIN20-0502		0847						
	18	PIN20-0550		0900						
	19	PIN20-0503		0922						
	20	PIN20-M001		1011						
	21	PIN20-m053		1045						
	22	PIN20-MWL1		1305						
	23	PIN20-mwl2		1340						
	24	PIN20-0551		1350						
25	PIN20-MWL3		1405							
26	PIN20-MWL4		1430							
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION			COMMENTS/REMARKS					
<input type="checkbox"/> STANDARD <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER		APPROVED BY: _____ <input type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____								
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED										
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY										
RELINQUISHED BY/SAMPLER: 1. S.M. Stoller	DATE/TIME: 1-15-04 11:06	RECEIVED BY: 1. S.M. Stoller 11:06	RELINQUISHED BY: 2. M. VDT	DATE/TIME: 1/15/04 14:35	RECEIVED BY: Munir Mohammad					
RELINQUISHED BY: 3.	DATE/TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE/TIME:	RECEIVED BY: 4.					
RELINQUISHED BY: 5.	DATE/TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE <input type="checkbox"/>		ON ICE <input type="checkbox"/>	TEMPERATURE <input type="checkbox"/> °C			

**F21629: Chain of Custody**

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## CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

ACCUTEST QUOTE #:

F21629

CLIENT INFORMATION		FACILITY INFORMATION		ANALYTICAL INFORMATION		MATRIX CODES								
NAME: S.M. Stoller ADDRESS: 2597 B 3/4 Rd CITY: Grand Junction CO ZIP: 81503 BEND REPORT TO: Keith Miller PHONE #: 970-248-6598		PROJECT NAME: STAR Center LOCATION: Largo, FL PROJECT NO.: 110406202 On site contact Barry Rice FAX #: 727-549-1121				DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID								
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION		PRESERVATION										
		DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	HCl	NH3	HNO3	Hg	None			
27	PIN20-MWLS	1-14-04	1500	JC	GW	3	X			X				
28	PIN20-MWL6		↓	1555		3	X			X				
29	PIN20-m035	1-15-04	0730			3	X			X				
30	PTN20-M38D		↓	0750										
31	PIN20-M41D		↓	0815	↓	↓								
15-15-04														
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		COMMENTS/REMARKS										
<input type="checkbox"/> STANDARD <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER		APPROVED BY: _____  EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED		<input type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____										
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY														
RELINQUISHED BY/SAMPLER: 1. <i>Don Capell</i>	DATE/TIME: 1-15-04 1100	RECEIVED BY: 1. <i>A. J. Bell</i> 1/15/04 1100	RELINQUISHED BY: 2. <i>A. J. Bell</i> 1/15/04	DATE/TIME: 14:35	RECEIVED BY: <i>Muena Mohammed</i>									
RELINQUISHED BY: 3.	DATE/TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE/TIME:	RECEIVED BY: 4.									
RELINQUISHED BY: 5.	DATE/TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE		<input type="checkbox"/> ON ICE	TEMPERATURE							

4.1

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F21629: Chain of Custody

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## ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

**F21629**

Accutest's Job Number:

Client: Sm StollerProject: Star Center QuarterlyDate Received: 1/15/04Time Received: 1435# of Coolers Received: 2Cooler Temperatures: 30, 2.2Delivery Method: FedEx UPS **Accutest Courier** Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?

 Yes No

Chain of Custody Provided ?

 Yes No

COC Match Bottle Label ID's ?

 Yes No

Sample Labels Present on all bottles ?

 Yes No

All Analyses Marked On COC ?

 Yes No

Are All Bottles Intact ?

 Yes No

Samples Preserved Correctly ?

 Yes No

Correct Number of Containers Used ?

 Yes No

Sufficient Sample Volume ?

 Yes No

Trip Blank Provided ?

 Yes No

Trip Blank on COC ?

 Yes No

Trip Blank Intact ?

 Yes No N/A

Trip Blank Matrix ?

 Soil Water N/A

Number of Enclosures ?

Number of Soil Field Kits ?

Summary of Comments: Only received vials no metals.The B & the COC's has As as analysis.For samples 30 and 31 analyses not checkedIf on COC.Signature: Muna Mohammed Date: 1/15/04

Review Signature: \_\_\_\_\_

ASBD 12/30/03

**F21629: Chain of Custody****Page 5 of 5**

## GC Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR863-MB	QR020354.D 1		01/19/04	RA	n/a	n/a	GQR863

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-1, F21629-2, F21629-4, F21629-5, F21629-6, F21629-7, F21629-8, F21629-10, F21629-11, F21629-12, F21629-13, F21629-14, F21629-15, F21629-16, F21629-17

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

## Method Blank Summary

Page 2 of 2

Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR863-MB	QR020354.D 1		01/19/04	RA	n/a	n/a	GQR863

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-1, F21629-2, F21629-4, F21629-5, F21629-6, F21629-7, F21629-8, F21629-10, F21629-11, F21629-12, F21629-13, F21629-14, F21629-15, F21629-16, F21629-17

### CAS No. Surrogate Recoveries Limits

352-33-0	1-Chloro-4-fluorobenzene	93%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	99%	70-123%
563-58-6	1,1-Dichloropropene	97%	86-112%
563-58-6	1,1-Dichloropropene	107%	86-112%

## Method Blank Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR866-MB	QR020432.D 1		01/22/04	RA	n/a	n/a	GQR866

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-3, F21629-9, F21629-17, F21629-19, F21629-20, F21629-21, F21629-24, F21629-25, F21629-26

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

## Method Blank Summary

Page 2 of 2

Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR866-MB	QR020432.D 1		01/22/04	RA	n/a	n/a	GQR866

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-3, F21629-9, F21629-17, F21629-19, F21629-20, F21629-21, F21629-24, F21629-25, F21629-26

### CAS No. Surrogate Recoveries Limits

352-33-0	1-Chloro-4-fluorobenzene	93%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	104%	70-123%
563-58-6	1,1-Dichloropropene	100%	86-112%
563-58-6	1,1-Dichloropropene	106%	86-112%

## Method Blank Summary

Page 1 of 2

Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR867-MB	QR020468.D 1		01/23/04	RA	n/a	n/a	GQR867

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-22, F21629-23, F21629-27, F21629-28, F21629-29, F21629-30, F21629-31

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

## Method Blank Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR867-MB	QR020468.D 1		01/23/04	RA	n/a	n/a	GQR867

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-22, F21629-23, F21629-27, F21629-28, F21629-29, F21629-30, F21629-31

CAS No.	Surrogate Recoveries	Limits	
352-33-0	1-Chloro-4-fluorobenzene	93%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	103%	70-123%
563-58-6	1,1-Dichloropropene	99%	86-112%
563-58-6	1,1-Dichloropropene	111%	86-112%

## Method Blank Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR869-MB	QR020524.D 1		01/26/04	RA	n/a	n/a	GQR869

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-18

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	1.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-00-3	Chloroethane	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

## Method Blank Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR869-MB	QR020524.D 1		01/26/04	RA	n/a	n/a	GQR869

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-18

CAS No.	Surrogate Recoveries	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%      70-123%
352-33-0	1-Chloro-4-fluorobenzene	98%      70-123%
563-58-6	1,1-Dichloropropene	101%      86-112%
563-58-6	1,1-Dichloropropene	108%      86-112%

**Blank Spike Summary**

Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR863-BS	QR020353.D	1	01/19/04	RA	n/a	n/a	GQR863

**The QC reported here applies to the following samples:****Method:** SW846 8021B

F21629-1, F21629-2, F21629-4, F21629-5, F21629-6, F21629-7, F21629-8, F21629-10, F21629-11, F21629-12, F21629-13, F21629-14, F21629-15, F21629-16, F21629-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.6	103	86-121
75-27-4	Bromodichloromethane	20	19.5	98	82-107
75-25-2	Bromoform	20	19.2	96	74-111
74-83-9	Bromomethane	20	22.6	113	64-132
56-23-5	Carbon tetrachloride	20	20.7	104	92-129
108-90-7	Chlorobenzene	20	20.7	104	81-119
124-48-1	Dibromochloromethane	20	18.6	93	77-109
75-00-3	Chloroethane	20	22.2	111	83-125
110-75-8	2-Chloroethylvinyl ether	20	23.9	120	45-150
67-66-3	Chloroform	20	19.2	96	85-111
74-87-3	Chloromethane	20	25.1	126	65-141
95-50-1	1,2-Dichlorobenzene	20	19.9	100	75-120
541-73-1	1,3-Dichlorobenzene	20	20.9	105	77-121
106-46-7	1,4-Dichlorobenzene	20	20.0	100	75-122
75-71-8	Dichlorodifluoromethane	20	26.8	134	51-152
75-34-3	1,1-Dichloroethane	20	20.0	100	94-126
107-06-2	1,2-Dichloroethane	20	19.2	96	88-116
75-35-4	1,1-Dichloroethene	20	22.9	115	83-134
156-59-2	cis-1,2-Dichloroethene	20	20.2	101	83-115
156-60-5	trans-1,2-Dichloroethene	20	21.6	108	94-129
78-87-5	1,2-Dichloropropane	20	20.2	101	90-118
10061-01-5	cis-1,3-Dichloropropene	20	20.5	103	96-125
10061-02-6	trans-1,3-Dichloropropene	20	18.5	93	85-120
100-41-4	Ethylbenzene	20	20.3	102	81-126
75-09-2	Methylene chloride	20	20.0	100	72-137
1634-04-4	Methyl Tert Butyl Ether	20	19.2	96	76-117
79-34-5	1,1,2,2-Tetrachloroethane	20	20.5	103	82-119
127-18-4	Tetrachloroethene	20	20.9	105	94-125
108-88-3	Toluene	20	19.8	99	82-123
71-55-6	1,1,1-Trichloroethane	20	20.1	101	89-127
79-00-5	1,1,2-Trichloroethane	20	20.4	102	86-117
79-01-6	Trichloroethene	20	20.5	103	92-124
75-69-4	Trichlorofluoromethane	20	23.4	117	77-139
75-01-4	Vinyl chloride	20	24.1	121	59-146
95-47-6	o-Xylene	20	19.7	99	81-123
	m,p-Xylene	40	39.8	100	82-126

**Blank Spike Summary**

Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR863-BS	QR020353.D	1	01/19/04	RA	n/a	n/a	GQR863

**The QC reported here applies to the following samples:****Method:** SW846 8021B

F21629-1, F21629-2, F21629-4, F21629-5, F21629-6, F21629-7, F21629-8, F21629-10, F21629-11, F21629-12, F21629-13, F21629-14, F21629-15, F21629-16, F21629-17

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	105%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	105%	70-123%
563-58-6	1,1-Dichloropropene	96%	86-112%
563-58-6	1,1-Dichloropropene	95%	86-112%

## Blank Spike Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR867-BS	QR020467.D 1		01/23/04	RA	n/a	n/a	GQR867

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-22, F21629-23, F21629-27, F21629-28, F21629-29, F21629-30, F21629-31

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	22.4	112	86-121
75-27-4	Bromodichloromethane	20	19.7	99	82-107
75-25-2	Bromoform	20	18.2	91	74-111
74-83-9	Bromomethane	20	20.2	101	64-132
56-23-5	Carbon tetrachloride	20	20.9	105	92-129
108-90-7	Chlorobenzene	20	20.0	100	81-119
124-48-1	Dibromochloromethane	20	17.5	88	77-109
75-00-3	Chloroethane	20	21.1	106	83-125
110-75-8	2-Chloroethylvinyl ether	20	18.0	90	45-150
67-66-3	Chloroform	20	18.4	92	85-111
74-87-3	Chloromethane	20	17.1	86	65-141
95-50-1	1,2-Dichlorobenzene	20	18.8	94	75-120
541-73-1	1,3-Dichlorobenzene	20	19.5	98	77-121
106-46-7	1,4-Dichlorobenzene	20	19.8	99	75-122
75-71-8	Dichlorodifluoromethane	20	29.3	147	51-152
75-34-3	1,1-Dichloroethane	20	20.3	102	94-126
107-06-2	1,2-Dichloroethane	20	19.8	99	88-116
75-35-4	1,1-Dichloroethene	20	21.4	107	83-134
156-59-2	cis-1,2-Dichloroethene	20	22.4	112	83-115
156-60-5	trans-1,2-Dichloroethene	20	20.0	100	94-129
78-87-5	1,2-Dichloropropane	20	19.7	99	90-118
10061-01-5	cis-1,3-Dichloropropene	20	19.7	99	96-125
10061-02-6	trans-1,3-Dichloropropene	20	18.4	92	85-120
100-41-4	Ethylbenzene	20	20.8	104	81-126
75-09-2	Methylene chloride	20	20.0	100	72-137
1634-04-4	Methyl Tert Butyl Ether	20	19.4	97	76-117
79-34-5	1,1,2,2-Tetrachloroethane	20	18.5	93	82-119
127-18-4	Tetrachloroethene	20	20.3	102	94-125
108-88-3	Toluene	20	20.4	102	82-123
71-55-6	1,1,1-Trichloroethane	20	19.8	99	89-127
79-00-5	1,1,2-Trichloroethane	20	18.6	93	86-117
79-01-6	Trichloroethene	20	19.8	99	92-124
75-69-4	Trichlorofluoromethane	20	21.8	109	77-139
75-01-4	Vinyl chloride	20	22.3	112	59-146
95-47-6	o-Xylene	20	20.1	101	81-123
	m,p-Xylene	40	41.0	103	82-126

## Blank Spike Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR867-BS	QR020467.D 1		01/23/04	RA	n/a	n/a	GQR867

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-22, F21629-23, F21629-27, F21629-28, F21629-29, F21629-30, F21629-31

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	99%	70-123%
563-58-6	1,1-Dichloropropene	99%	86-112%
563-58-6	1,1-Dichloropropene	99%	86-112%

## Blank Spike Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR869-BS	QR020523.D 1		01/26/04	RA	n/a	n/a	GQR869

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.6	103	86-121
75-27-4	Bromodichloromethane	20	18.6	93	82-107
75-25-2	Bromoform	20	18.4	92	74-111
74-83-9	Bromomethane	20	21.3	107	64-132
56-23-5	Carbon tetrachloride	20	19.8	99	92-129
108-90-7	Chlorobenzene	20	19.4	97	81-119
124-48-1	Dibromochloromethane	20	17.8	89	77-109
75-00-3	Chloroethane	20	20.2	101	83-125
110-75-8	2-Chloroethylvinyl ether	20	18.5	93	45-150
67-66-3	Chloroform	20	19.1	96	85-111
74-87-3	Chloromethane	20	24.0	120	65-141
95-50-1	1,2-Dichlorobenzene	20	18.8	94	75-120
541-73-1	1,3-Dichlorobenzene	20	19.1	96	77-121
106-46-7	1,4-Dichlorobenzene	20	18.9	95	75-122
75-71-8	Dichlorodifluoromethane	20	27.3	137	51-152
75-34-3	1,1-Dichloroethane	20	18.9	95	94-126
107-06-2	1,2-Dichloroethane	20	19.4	97	88-116
75-35-4	1,1-Dichloroethene	20	22.0	110	83-134
156-59-2	cis-1,2-Dichloroethene	20	20.6	103	83-115
156-60-5	trans-1,2-Dichloroethene	20	20.0	100	94-129
78-87-5	1,2-Dichloropropane	20	18.8	94	90-118
10061-01-5	cis-1,3-Dichloropropene	20	19.2	96	96-125
10061-02-6	trans-1,3-Dichloropropene	20	17.9	90	85-120
100-41-4	Ethylbenzene	20	21.1	106	81-126
75-09-2	Methylene chloride	20	19.1	96	72-137
1634-04-4	Methyl Tert Butyl Ether	20	19.1	96	76-117
79-34-5	1,1,2,2-Tetrachloroethane	20	18.5	93	82-119
127-18-4	Tetrachloroethene	20	20.0	100	94-125
108-88-3	Toluene	20	20.6	103	82-123
71-55-6	1,1,1-Trichloroethane	20	19.0	95	89-127
79-00-5	1,1,2-Trichloroethane	20	18.9	95	86-117
79-01-6	Trichloroethene	20	20.2	101	92-124
75-69-4	Trichlorofluoromethane	20	21.6	108	77-139
75-01-4	Vinyl chloride	20	22.8	114	59-146
95-47-6	o-Xylene	20	20.3	102	81-123
	m,p-Xylene	40	41.4	104	82-126

## Blank Spike Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR869-BS	QR020523.D 1		01/26/04	RA	n/a	n/a	GQR869

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-18

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	98%	70-123%
563-58-6	1,1-Dichloropropene	101%	86-112%
563-58-6	1,1-Dichloropropene	95%	86-112%

# Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21629-12MS	QR020381.D 1		01/20/04	RA	n/a	n/a	GQR863
F21629-12MSD	QR020382.D 1		01/20/04	RA	n/a	n/a	GQR863
F21629-12	QR020372.D 1		01/20/04	RA	n/a	n/a	GQR863

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-1, F21629-2, F21629-4, F21629-5, F21629-6, F21629-7, F21629-8, F21629-10, F21629-11, F21629-12, F21629-13, F21629-14, F21629-15, F21629-16, F21629-17

CAS No.	Compound	F21629-12 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	20	21.2	106	21.1	106	0	77-125/6
75-27-4	Bromodichloromethane	ND	20	19.9	100	20.8	104	4	77-111/9
75-25-2	Bromoform	ND	20	18.2	91	19.9	100	9	69-117/9
74-83-9	Bromomethane	ND	20	22.9	115	22.3	112	3	60-134/14
56-23-5	Carbon tetrachloride	ND	20	17.1	86	17.2	86	1	83-133/8
108-90-7	Chlorobenzene	ND	20	21.4	107	21.5	108	0	78-120/8
124-48-1	Dibromochloromethane	ND	20	18.4	92	19.2	96	4	70-117/9
75-00-3	Chloroethane	ND	20	21.9	110	22.3	112	2	66-135/13
110-75-8	2-Chloroethylvinyl ether	ND	20	4.9	25	ND	0*	200*	20-122/32
67-66-3	Chloroform	ND	20	19.5	98	19.7	99	1	80-116/7
74-87-3	Chloromethane	ND	20	24.9	125	26.2	131	5	42-154/21
95-50-1	1,2-Dichlorobenzene	ND	20	19.6	98	20.4	102	4	69-125/7
541-73-1	1,3-Dichlorobenzene	ND	20	21.8	109	21.3	107	2	71-126/7
106-46-7	1,4-Dichlorobenzene	ND	20	21.0	105	21.3	107	1	67-129/7
75-71-8	Dichlorodifluoromethane	ND	20	27.1	136	27.7	139	2	19-163/14
75-34-3	1,1-Dichloroethane	ND	20	21.2	106	20.6	103	3	90-129/8
107-06-2	1,2-Dichloroethane	ND	20	20.0	100	20.4	102	2	87-117/7
75-35-4	1,1-Dichloroethene	ND	20	23.1	116	23.2	116	0	81-139/19
156-59-2	cis-1,2-Dichloroethene	ND	20	20.7	104	20.7	104	0	80-116/8
156-60-5	trans-1,2-Dichloroethene	ND	20	22.0	110	22.3	112	1	88-133/9
78-87-5	1,2-Dichloropropane	ND	20	21.2	106	20.7	104	2	86-123/9
10061-01-5	cis-1,3-Dichloropropene	ND	20	20.3	102	20.8	104	2	86-129/10
10061-02-6	trans-1,3-Dichloropropene	ND	20	19.4	97	19.6	98	1	74-125/11
100-41-4	Ethylbenzene	ND	20	21.0	105	20.8	104	1	74-127/6
75-09-2	Methylene chloride	ND	20	20.3	102	20.5	103	1	61-144/26
1634-04-4	Methyl Tert Butyl Ether	ND	20	18.8	94	20.1	101	7	66-127/9
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	20.0	100	21.7	109	8	80-126/10
127-18-4	Tetrachloroethene	ND	20	22.2	111	21.7	109	2	91-125/8
108-88-3	Toluene	ND	20	20.6	103	20.5	103	0	77-124/5
71-55-6	1,1,1-Trichloroethane	ND	20	21.4	107	21.8	109	2	85-129/9
79-00-5	1,1,2-Trichloroethane	ND	20	19.9	100	20.7	104	4	85-119/9
79-01-6	Trichloroethene	ND	20	20.8	104	20.8	104	0	88-124/8
75-69-4	Trichlorofluoromethane	ND	20	23.4	117	25.5	128	9	68-135/15
75-01-4	Vinyl chloride	ND	20	22.6	113	23.3	117	3	43-150/22
95-47-6	o-Xylene	ND	20	20.4	102	20.4	102	0	77-122/5
	m,p-Xylene	ND	40	41.1	103	40.9	102	0	75-127/6

## Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21629-12MS	QR020381.D	1	01/20/04	RA	n/a	n/a	GQR863
F21629-12MSD	QR020382.D	1	01/20/04	RA	n/a	n/a	GQR863
F21629-12	QR020372.D	1	01/20/04	RA	n/a	n/a	GQR863

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-1, F21629-2, F21629-4, F21629-5, F21629-6, F21629-7, F21629-8, F21629-10, F21629-11, F21629-12, F21629-13, F21629-14, F21629-15, F21629-16, F21629-17

CAS No.	Surrogate Recoveries	MS	MSD	F21629-12	Limits
352-33-0	1-Chloro-4-fluorobenzene	107%	107%	92%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	108%	110%	97%	70-123%
563-58-6	1,1-Dichloropropene	97%	96%	97%	86-112%
563-58-6	1,1-Dichloropropene	94%	95%	102%	86-112%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21629-17MS	QR020441.D 1		01/22/04	RA	n/a	n/a	GQR866
F21629-17MSD	QR020442.D 1		01/22/04	RA	n/a	n/a	GQR866
F21629-17	QR020436.D 10		01/22/04	RA	n/a	n/a	GQR866

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-3, F21629-9, F21629-17, F21629-19, F21629-20, F21629-21, F21629-24, F21629-25, F21629-26

CAS No.	Compound	F21629-17 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	20	20.8	104	20.6	103	1	77-125/6
75-27-4	Bromodichloromethane	ND	20	19.0	95	20.0	100	5	77-111/9
75-25-2	Bromoform	ND	20	18.2	91	18.7	94	3	69-117/9
74-83-9	Bromomethane	ND	20	21.8	109	23.2	116	6	60-134/14
56-23-5	Carbon tetrachloride	ND	20	20.2	101	20.9	105	3	83-133/8
108-90-7	Chlorobenzene	ND	20	19.5	98	20.5	103	5	78-120/8
124-48-1	Dibromochloromethane	ND	20	17.3	87	18.2	91	5	70-117/9
75-00-3	Chloroethane	ND	20	22.9	115	23.4	117	2	66-135/13
110-75-8	2-Chloroethylvinyl ether	ND	20	4.4	22	2.9	15*	41*	20-122/32
67-66-3	Chloroform	ND	20	18.3	92	19.1	96	4	80-116/7
74-87-3	Chloromethane	ND	20	19.9	100	19.4	97	3	42-154/21
95-50-1	1,2-Dichlorobenzene	ND	20	18.7	94	18.8	94	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND	20	18.9	95	20.1	101	6	71-126/7
106-46-7	1,4-Dichlorobenzene	ND	20	19.7	99	20.4	102	3	67-129/7
75-71-8	Dichlorodifluoromethane	ND	20	30.4	152	32.5	163	7	19-163/14
75-34-3	1,1-Dichloroethane	ND	20	20.0	100	20.4	102	2	90-129/8
107-06-2	1,2-Dichloroethane	ND	20	19.0	95	20.2	101	6	87-117/7
75-35-4	1,1-Dichloroethene	ND	20	21.2	106	22.8	114	7	81-139/19
156-59-2	cis-1,2-Dichloroethene	154	20	31.5	-613* a	31.7	-612* a	1	80-116/8
156-60-5	trans-1,2-Dichloroethene	ND	20	20.1	101	21.0	105	4	88-133/9
78-87-5	1,2-Dichloropropane	ND	20	19.2	96	19.8	99	3	86-123/9
10061-01-5	cis-1,3-Dichloropropene	ND	20	19.1	96	20.6	103	8	86-129/10
10061-02-6	trans-1,3-Dichloropropene	ND	20	18.0	90	18.5	93	3	74-125/11
100-41-4	Ethylbenzene	ND	20	19.5	98	19.3	97	1	74-127/6
75-09-2	Methylene chloride	ND	20	20.7	104	21.9	110	6	61-144/26
1634-04-4	Methyl Tert Butyl Ether	ND	20	17.7	89	17.7	89	0	66-127/9
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	18.9	95	19.9	100	5	80-126/10
127-18-4	Tetrachloroethene	ND	20	20.0	100	20.4	102	2	91-125/8
108-88-3	Toluene	ND	20	19.0	95	18.8	94	1	77-124/5
71-55-6	1,1,1-Trichloroethane	ND	20	18.9	95	19.8	99	5	85-129/9
79-00-5	1,1,2-Trichloroethane	ND	20	19.0	95	19.9	100	5	85-119/9
79-01-6	Trichloroethene	ND	20	19.1	96	20.2	101	6	88-124/8
75-69-4	Trichlorofluoromethane	ND	20	21.2	106	20.5	103	3	68-135/15
75-01-4	Vinyl chloride	162	20	34.6	-637* a	35.0	-635* a	1	43-150/22
95-47-6	o-Xylene	ND	20	18.8	94	18.8	94	0	77-122/5
	m,p-Xylene	ND	40	38.2	96	37.8	95	1	75-127/6

## Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21629-17MS	QR020441.D 1		01/22/04	RA	n/a	n/a	GQR866
F21629-17MSD	QR020442.D 1		01/22/04	RA	n/a	n/a	GQR866
F21629-17	QR020436.D 10		01/22/04	RA	n/a	n/a	GQR866

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-3, F21629-9, F21629-17, F21629-19, F21629-20, F21629-21, F21629-24, F21629-25, F21629-26

CAS No.	Surrogate Recoveries	MS	MSD	F21629-17	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	103%	93%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	99%	104%	94%	70-123%
563-58-6	1,1-Dichloropropene	100%	100%	100%	86-112%
563-58-6	1,1-Dichloropropene	99%	101%	99%	86-112%

(a) Outside control limits due to high level in sample relative to spike amount.

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21629-30MS	QR020479.D	10	01/23/04	RA	n/a	n/a	GQR867
F21629-30MSD	QR020480.D	10	01/23/04	RA	n/a	n/a	GQR867
F21629-30 <sup>a</sup>	QR020474.D	10	01/23/04	RA	n/a	n/a	GQR867

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-22, F21629-23, F21629-27, F21629-28, F21629-29, F21629-30, F21629-31

CAS No.	Compound	F21629-30 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	200	220	110	219	110	0	77-125/6	
75-27-4	Bromodichloromethane	ND	200	199	100	197	99	1	77-111/9	
75-25-2	Bromoform	ND	200	190	95	193	97	2	69-117/9	
74-83-9	Bromomethane	ND	200	203	102	219	110	8	60-134/14	
56-23-5	Carbon tetrachloride	ND	200	208	104	209	105	0	83-133/8	
108-90-7	Chlorobenzene	ND	200	203	102	205	103	1	78-120/8	
124-48-1	Dibromochloromethane	ND	200	185	93	185	93	0	70-117/9	
75-00-3	Chloroethane	ND	200	212	106	214	107	1	66-135/13	
110-75-8	2-Chloroethylvinyl ether	ND	200	15.5	8*	10.7	5*	37*	20-122/32	
67-66-3	Chloroform	ND	200	189	95	194	97	3	80-116/7	
74-87-3	Chloromethane	ND	200	180	90	203	102	12	42-154/21	
95-50-1	1,2-Dichlorobenzene	ND	200	192	96	190	95	1	69-125/7	
541-73-1	1,3-Dichlorobenzene	ND	200	201	101	199	100	1	71-126/7	
106-46-7	1,4-Dichlorobenzene	ND	200	199	100	198	99	1	67-129/7	
75-71-8	Dichlorodifluoromethane	ND	200	302	151	323	162	7	19-163/14	
75-34-3	1,1-Dichloroethane	ND	200	199	100	205	103	3	90-129/8	
107-06-2	1,2-Dichloroethane	ND	200	202	101	200	100	1	87-117/7	
75-35-4	1,1-Dichloroethene	ND	200	221	111	221	111	0	81-139/19	
156-59-2	cis-1,2-Dichloroethene	ND	200	222	111	221	111	0	80-116/8	
156-60-5	trans-1,2-Dichloroethene	ND	200	186	93	190	95	2	88-133/9	
78-87-5	1,2-Dichloropropane	ND	200	200	100	199	100	1	86-123/9	
10061-01-5	cis-1,3-Dichloropropene	ND	200	202	101	200	100	1	86-129/10	
10061-02-6	trans-1,3-Dichloropropene	ND	200	191	96	188	94	2	74-125/11	
100-41-4	Ethylbenzene	ND	200	205	103	204	102	0	74-127/6	
75-09-2	Methylene chloride	ND	200	202	101	199	100	1	61-144/26	
1634-04-4	Methyl Tert Butyl Ether	ND	200	190	95	188	94	1	66-127/9	
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	201	101	206	103	2	80-126/10	
127-18-4	Tetrachloroethene	ND	200	202	101	206	103	2	91-125/8	
108-88-3	Toluene	ND	200	199	100	199	100	0	77-124/5	
71-55-6	1,1,1-Trichloroethane	ND	200	203	102	199	100	2	85-129/9	
79-00-5	1,1,2-Trichloroethane	ND	200	197	99	197	99	0	85-119/9	
79-01-6	Trichloroethene	ND	200	209	105	204	102	2	88-124/8	
75-69-4	Trichlorofluoromethane	ND	200	223	112	247	124	10	68-135/15	
75-01-4	Vinyl chloride	ND	200	238	119	241	121	1	43-150/22	
95-47-6	o-Xylene	ND	200	196	98	196	98	0	77-122/5	
	m,p-Xylene	ND	400	400	100	399	100	0	75-127/6	

## Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21629-30MS	QR020479.D	10	01/23/04	RA	n/a	n/a	GQR867
F21629-30MSD	QR020480.D	10	01/23/04	RA	n/a	n/a	GQR867
F21629-30 <sup>a</sup>	QR020474.D	10	01/23/04	RA	n/a	n/a	GQR867

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-22, F21629-23, F21629-27, F21629-28, F21629-29, F21629-30, F21629-31

CAS No.	Surrogate Recoveries	MS	MSD	F21629-30	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	102%	93%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	103%	102%	103%	70-123%
563-58-6	1,1-Dichloropropene	99%	98%	99%	86-112%
563-58-6	1,1-Dichloropropene	99%	100%	109%	86-112%

(a) Dilution required due to matrix interference (sample foamed).

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21661-9MS	QR020527.D	1000	01/26/04	RA	n/a	n/a	GQR869
F21661-9MSD	QR020528.D	1000	01/26/04	RA	n/a	n/a	GQR869
F21661-9	QR020526.D	1000	01/26/04	RA	n/a	n/a	GQR869

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-18

CAS No.	Compound	F21661-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20000	19400	97	19200	96	1	77-125/6
75-27-4	Bromodichloromethane	ND		20000	19400	97	19100	96	2	77-111/9
75-25-2	Bromoform	ND		20000	18800	94	18600	93	1	69-117/9
74-83-9	Bromomethane	ND		20000	22400	112	21900	110	2	60-134/14
56-23-5	Carbon tetrachloride	ND		20000	19700	99	19900	100	1	83-133/8
108-90-7	Chlorobenzene	ND		20000	20000	100	19900	100	1	78-120/8
124-48-1	Dibromochloromethane	ND		20000	18300	92	18600	93	2	70-117/9
75-00-3	Chloroethane	ND		20000	20300	102	21000	105	3	66-135/13
110-75-8	2-Chloroethylvinyl ether	ND		20000	ND	0*	ND	0*	nc	20-122/32
67-66-3	Chloroform	ND		20000	19300	97	19000	95	2	80-116/7
74-87-3	Chloromethane	ND		20000	25100	126	23900	120	5	42-154/21
95-50-1	1,2-Dichlorobenzene	ND		20000	19500	98	19300	97	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20000	19900	100	19200	96	4	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20000	19900	100	19400	97	3	67-129/7
75-71-8	Dichlorodifluoromethane	ND		20000	28000	140	28300	142	1	19-163/14
75-34-3	1,1-Dichloroethane	ND		20000	19700	99	19400	97	2	90-129/8
107-06-2	1,2-Dichloroethane	ND		20000	19100	96	19400	97	2	87-117/7
75-35-4	1,1-Dichloroethene	ND		20000	21800	109	21900	110	0	81-139/19
156-59-2	cis-1,2-Dichloroethene	ND		20000	21400	107	21100	106	1	80-116/8
156-60-5	trans-1,2-Dichloroethene	ND		20000	20200	101	20300	102	0	88-133/9
78-87-5	1,2-Dichloropropane	ND		20000	19600	98	20100	101	3	86-123/9
10061-01-5	cis-1,3-Dichloropropene	ND		20000	19500	98	19200	96	2	86-129/10
10061-02-6	trans-1,3-Dichloropropene	ND		20000	18100	91	18100	91	0	74-125/11
100-41-4	Ethylbenzene	ND		20000	19800	99	19400	97	2	74-127/6
75-09-2	Methylene chloride	ND		20000	19000	95	19700	99	4	61-144/26
1634-04-4	Methyl Tert Butyl Ether	ND		20000	18300	92	18300	92	0	66-127/9
79-34-5	1,1,2,2-Tetrachloroethane	ND		20000	18600	93	18600	93	0	80-126/10
127-18-4	Tetrachloroethene	ND		20000	20700	104	20800	104	0	91-125/8
108-88-3	Toluene	ND		20000	19600	98	19400	97	1	77-124/5
71-55-6	1,1,1-Trichloroethane	ND		20000	19700	99	20000	100	2	85-129/9
79-00-5	1,1,2-Trichloroethane	ND		20000	19500	98	18800	94	4	85-119/9
79-01-6	Trichloroethene	ND		20000	20500	103	20200	101	1	88-124/8
75-69-4	Trichlorofluoromethane	ND		20000	22000	110	22400	112	2	68-135/15
75-01-4	Vinyl chloride	12300		20000	35700	117	35800	118	0	43-150/22
95-47-6	o-Xylene	ND		20000	18900	95	18800	94	1	77-122/5
	m,p-Xylene	ND		40000	38700	97	38000	95	2	75-127/6

## Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F21629

Account: STOLCOGJ S M Stoller

Project: Quarterly Sampling, STAR Center, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21661-9MS	QR020527.D	1000	01/26/04	RA	n/a	n/a	GQR869
F21661-9MSD	QR020528.D	1000	01/26/04	RA	n/a	n/a	GQR869
F21661-9	QR020526.D	1000	01/26/04	RA	n/a	n/a	GQR869

The QC reported here applies to the following samples:

Method: SW846 8021B

F21629-18

CAS No.	Surrogate Recoveries	MS	MSD	F21661-9	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	103%	92%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	100%	101%	95%	70-123%
563-58-6	1,1-Dichloropropene	101%	101%	101%	86-112%
563-58-6	1,1-Dichloropropene	97%	97%	107%	86-112%



Southeast

03/31/04

Technical Report for

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S M Stoller

STAR Center- Ad-hoc PIN-AJ., Largo, FL

110406202

Accutest Job Number: F22105

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Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **20**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads "Harry Behzadi".

Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F22105

STAR Center- Ad-hoc PIN-AJ., Largo, FL  
Project No: 110406202

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
F22105-1	02/10/04	10:15 JC	02/11/04	SO	Soil
F22105-2	02/10/04	10:45 JC	02/11/04	SO	Soil
F22105-3	02/10/04	13:30 JC	02/11/04	SO	Soil

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Soil samples reported on a dry weight basis unless otherwise indicated on result page.

**Accutest Laboratories Southeast, Inc.**  
**Analytical Narrative**

Client: S M Stoller  
Site: Star Center, Ad-hoc PIN-AJ., Largo FL  
Job No.: F22105  
Report Date: February 27, 2004

3 samples were collected on February 10, 2004 and received on February 11, 2004. Samples were intact and properly cooled. A listing of the Laboratory Sample ID, Client Sample ID, and dates of collection are presented in the Results Summary section of this report.

All method specified holding times, calibrations and quality control performance criteria were met, with the following notes:

**VOCs, SW846 8021B:**

- The MS/MSD associated with analytical batch VJ253 had recoveries below acceptance limits. The Blank Spike was within limits. Data not adversely affected.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

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Sue O. Bell, Project Manager (signature on file)

Date: February 27, 2004

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-DW01-N001	<b>Date Sampled:</b>	02/10/04
<b>Lab Sample ID:</b>	F22105-1	<b>Date Received:</b>	02/11/04
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	86.9
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	STAR Center- Ad-hoc PIN-AJ., Largo, FL		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	J005696.D	1	02/20/04	RA	n/a	n/a	VJ253
Run #2							

<b>Initial Weight</b>	
Run #1	5.12 g
Run #2	

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	5.6	2.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.6	2.2	ug/kg	
75-25-2	Bromoform	ND	5.6	2.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.6	2.2	ug/kg	
75-00-3	Chloroethane	ND	5.6	2.2	ug/kg	
67-66-3	Chloroform	ND	5.6	2.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	28	11	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.6	2.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.6	2.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.6	3.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.6	2.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.6	2.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.6	2.2	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.6	3.4	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.6	2.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	2.2	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.6	2.2	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.6	2.2	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.6	2.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.6	2.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.6	2.2	ug/kg	
74-83-9	Methyl bromide	ND	5.6	2.2	ug/kg	
74-87-3	Methyl chloride	ND	5.6	2.2	ug/kg	
75-09-2	Methylene chloride	ND	11	5.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.6	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.6	2.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.6	2.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.6	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.6	2.2	ug/kg	
108-88-3	Toluene	ND	5.6	2.2	ug/kg	
79-01-6	Trichloroethylene	4.1	5.6	2.2	ug/kg	J

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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**Client Sample ID:** PIN20-DW01-N001**Lab Sample ID:** F22105-1**Date Sampled:** 02/10/04**Matrix:** SO - Soil**Date Received:** 02/11/04**Method:** SW846 8260B**Percent Solids:** 86.9**Project:** STAR Center- Ad-hoc PIN-AJ., Largo, FL**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
75-69-4	Trichlorofluoromethane	ND	5.6	2.8	ug/kg	
75-01-4	Vinyl chloride	ND	5.6	2.8	ug/kg	
	m,p-Xylene	ND	11	2.8	ug/kg	
95-47-6	o-Xylene	ND	5.6	2.2	ug/kg	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	101%		78-123%
2037-26-5	Toluene-D8	95%		71-137%
460-00-4	4-Bromofluorobenzene	100%		61-157%
17060-07-0	1,2-Dichloroethane-D4	105%		74-125%

(a) Sample was received in a bulk container but was not preserved within 48 hours of sampling.

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-DW02-N001		<b>Date Sampled:</b>	02/10/04	
<b>Lab Sample ID:</b>	F22105-2		<b>Date Received:</b>	02/11/04	
<b>Matrix:</b>	SO - Soil		<b>Percent Solids:</b>	82.7	
<b>Method:</b>	SW846 8260B				
<b>Project:</b>	STAR Center- Ad-hoc PIN-AJ., Largo, FL				
Run #1 <sup>a</sup>	File ID	DF	Analyzed	By	Prep Date
Run #1	J005697.D	1	02/20/04	RA	n/a
Run #2					n/a
					Prep Batch
					VJ253

Initial Weight	
Run #1	5.16 g
Run #2	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.9	2.3	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	2.3	ug/kg	
75-25-2	Bromoform	ND	5.9	2.3	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	2.3	ug/kg	
75-00-3	Chloroethane	ND	5.9	2.3	ug/kg	
67-66-3	Chloroform	ND	5.9	2.3	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	29	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.9	2.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.9	2.3	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.9	3.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.9	2.3	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.9	2.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	2.3	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.9	3.5	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.9	2.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	2.3	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.9	2.3	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.9	2.3	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.9	2.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.9	2.3	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	2.3	ug/kg	
100-41-4	Ethylbenzene	ND	5.9	2.3	ug/kg	
74-83-9	Methyl bromide	ND	5.9	2.3	ug/kg	
74-87-3	Methyl chloride	ND	5.9	2.3	ug/kg	
75-09-2	Methylene chloride	ND	12	5.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.9	2.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.9	2.3	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	2.3	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.9	2.3	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.9	2.3	ug/kg	
108-88-3	Toluene	ND	5.9	2.3	ug/kg	
79-01-6	Trichloroethylene	ND	5.9	2.3	ug/kg	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-DW02-N001	<b>Date Sampled:</b>	02/10/04
<b>Lab Sample ID:</b>	F22105-2	<b>Date Received:</b>	02/11/04
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	82.7
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	STAR Center- Ad-hoc PIN-AJ., Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	5.9	2.9	ug/kg	
75-01-4	Vinyl chloride	ND	5.9	2.9	ug/kg	
	m,p-Xylene	ND	12	2.9	ug/kg	
95-47-6	o-Xylene	ND	5.9	2.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		78-123%
2037-26-5	Toluene-D8	96%		71-137%
460-00-4	4-Bromofluorobenzene	99%		61-157%
17060-07-0	1,2-Dichloroethane-D4	104%		74-125%

(a) Sample was received in a bulk container but was not preserved within 48 hours of sampling.

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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3**Client Sample ID:** PIN20-DW03-N001**Lab Sample ID:** F22105-3**Date Sampled:** 02/10/04**Matrix:** SO - Soil**Date Received:** 02/11/04**Method:** SW846 8260B**Percent Solids:** 77.8**Project:** STAR Center- Ad-hoc PIN-AJ., Largo, FL

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	J005698.D	1	02/20/04	RA	n/a	n/a	VJ253
Run #2							

**Initial Weight**

Run #1 5.03 g

Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	6.4	2.6	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	2.6	ug/kg	
75-25-2	Bromoform	ND	6.4	2.6	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	2.6	ug/kg	
75-00-3	Chloroethane	ND	6.4	2.6	ug/kg	
67-66-3	Chloroform	ND	6.4	2.6	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	32	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	2.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.4	2.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.4	3.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.4	2.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.4	2.6	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	2.6	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.4	3.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.4	2.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	2.6	ug/kg	
541-73-1	m-Dichlorobenzene	ND	6.4	2.6	ug/kg	
95-50-1	o-Dichlorobenzene	ND	6.4	2.6	ug/kg	
106-46-7	p-Dichlorobenzene	ND	6.4	2.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.4	2.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	2.6	ug/kg	
100-41-4	Ethylbenzene	ND	6.4	2.6	ug/kg	
74-83-9	Methyl bromide	ND	6.4	2.6	ug/kg	
74-87-3	Methyl chloride	ND	6.4	2.6	ug/kg	
75-09-2	Methylene chloride	ND	13	6.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.4	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.4	2.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	2.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.4	2.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.4	2.6	ug/kg	
108-88-3	Toluene	8.5	6.4	2.6	ug/kg	
79-01-6	Trichloroethylene	ND	6.4	2.6	ug/kg	

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PIN20-DW03-N001	<b>Date Sampled:</b>	02/10/04
<b>Lab Sample ID:</b>	F22105-3	<b>Date Received:</b>	02/11/04
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	77.8
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	STAR Center- Ad-hoc PIN-AJ., Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	6.4	3.2	ug/kg	
75-01-4	Vinyl chloride	ND	6.4	3.2	ug/kg	
	m,p-Xylene	ND	13	3.2	ug/kg	
95-47-6	o-Xylene	ND	6.4	2.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		78-123%
2037-26-5	Toluene-D8	98%		71-137%
460-00-4	4-Bromofluorobenzene	102%		61-157%
17060-07-0	1,2-Dichloroethane-D4	100%		74-125%

(a) Sample was received in a bulk container but was not preserved within 48 hours of sampling.

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



## **CHAIN OF CUSTODY**

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUATEST JOB #:

**ACCUATEST QUOTE #:**

F22105

CLIENT INFORMATION		FACILITY INFORMATION		ANALYTICAL INFORMATION		MATRIX CODE		
<p><i>S.M. Stoller</i></p> <p>NAME 7887 Bryan Dairy Rd. Suite 260</p> <p>ADDRESS Large FL 33777</p> <p>CITY, STATE ZIP Keith Miller FL 33777</p> <p>SEND REPORT TO: PHONE # 970-248-6598</p>		<p>STAR Center - Ad-hoc PIN-AJ</p> <p>PROJECT NAME Large Fl</p> <p>LOCATION, 110406202</p> <p>PROJECT NO. On-site contact: Julian Caballero</p> <p>FAX# 727-549-1121</p>				DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID		
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION				LAB USE ONLY		
		DATE	TIME	SAMPLED BY:	MATRIX		OF BOTTLES	PRESERVATION
1	PIN20-DW01-N001	2-10-04	1015	g	so	1	HCl HNO3 H2SO4 None	1
2	PIN20-DW02-N001		↓ 1045	g	so	1		1
3	PIN20-DW03-N001		↓ 1330	cx	so	1		1
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION				COMMENTS/REMARKS		
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER _____	APPROVED BY: _____	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____	Please homogenize each sample prior to removing an aliquot for analysis.					
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY								
RELINQUISHED BY SAMPLER: <i>J. Stoller</i>	DATE/TIME: 2-11-04 / 1024	RECEIVED BY: <i>J. Stoller</i>	RELINQUISHED BY: 2. J. Stoller 2-11-04	DATE/TIME: 15:45	RECEIVED BY: <i>J. Stoller</i>			
RELINQUISHED BY: 3.	DATE/TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE/TIME:	RECEIVED BY: 4.			
RELINQUISHED BY: 5.	DATE/TIME:	RECEIVED BY: 5.	RELINQUISHED BY: 5.	DATE/TIME:	RECEIVED BY: 5.			
				SEAL #	PRESERVE WHERE APPLICABLE		ON ICE	
							TEMPERATURE	

## F22105: Chain of Custody

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## ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number:

**F22105**Client: SM StoilesProject: S-star Center - Ad-hoc - Pin-AJDate Received: 02-11-04 Time Received: 1545# of Coolers Received: 1 Cooler Temperatures: 2.2 °Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other

Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact?

No

Chain of Custody Provided?

No

COC Match Bottle Label ID's?

No

Sample Labels Present on all bottles?

No

All Analytes Marked On COC?

No

Are All Bottles Intact?

No

Samples Preserved Correctly?

No

Correct Number of Containers Used?

No

Sufficient Sample Volume?

No

Trip Blank Provided?

Yes

Trip Blank on COC?

Yes

Trip Blank Intact?

Yes

Trip Blank Matrix?

N/A

Number of Enclosures?

Soil

Water

N/A

Number of Soil Field Kits?

Soil

Water

N/A

Summary of Comments: \_\_\_\_\_

*[Signature]* J. P. Stiles Date: 2-11-04  
 Review Signature: *[Signature]*

ASBD 123003

## GC/MS Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

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Job Number: F22105

Account: STOLCOGJ S M Stoller

Project: STAR Center- Ad-hoc PIN-AJ., Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ253-MB	J005690.D	1	02/20/04	RA	n/a	n/a	VJ253

The QC reported here applies to the following samples:

Method: SW846 8260B

F22105-1, F22105-2, F22105-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	2.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	2.0	ug/kg	
75-25-2	Bromoform	ND	5.0	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	2.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	2.0	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	2.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	3.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	2.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	3.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	2.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	2.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene chloride	ND	10	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	2.0	ug/kg	
108-88-3	Toluene	ND	5.0	2.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	2.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.5	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	2.5	ug/kg	
	m,p-Xylene	ND	10	2.5	ug/kg	
95-47-6	o-Xylene	ND	5.0	2.0	ug/kg	

## Method Blank Summary

Page 2 of 2

Job Number: F22105

Account: STOLCOGJ S M Stoller

Project: STAR Center- Ad-hoc PIN-AJ., Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ253-MB	J005690.D	1	02/20/04	RA	n/a	n/a	VJ253

The QC reported here applies to the following samples:

Method: SW846 8260B

F22105-1, F22105-2, F22105-3

### CAS No. Surrogate Recoveries Limits

1868-53-7	Dibromofluoromethane	101%	78-123%
2037-26-5	Toluene-D8	96%	71-137%
460-00-4	4-Bromofluorobenzene	101%	61-157%
17060-07-0	1,2-Dichloroethane-D4	102%	74-125%

## Blank Spike Summary

Page 1 of 2

Job Number: F22105

Account: STOLCOGJ S M Stoller

Project: STAR Center- Ad-hoc PIN-AJ., Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ253-BS	J005689.D	1	02/20/04	RA	n/a	n/a	VJ253

The QC reported here applies to the following samples:

Method: SW846 8260B

F22105-1, F22105-2, F22105-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	48.1	96	74-124
75-27-4	Bromodichloromethane	50	48.7	97	74-124
75-25-2	Bromoform	50	46.7	93	79-127
108-90-7	Chlorobenzene	50	49.2	98	78-117
75-00-3	Chloroethane	50	51.0	102	63-147
67-66-3	Chloroform	50	49.9	100	75-121
110-75-8	2-Chloroethyl vinyl ether	250	193	77	31-165
56-23-5	Carbon tetrachloride	50	53.8	108	67-131
75-34-3	1,1-Dichloroethane	50	51.3	103	71-118
75-35-4	1,1-Dichloroethylene	50	50.4	101	64-126
107-06-2	1,2-Dichloroethane	50	48.5	97	72-120
78-87-5	1,2-Dichloropropane	50	51.9	104	74-126
124-48-1	Dibromochloromethane	50	48.8	98	78-120
75-71-8	Dichlorodifluoromethane	50	41.0	82	33-172
156-59-2	cis-1,2-Dichloroethylene	50	50.6	101	75-124
10061-01-5	cis-1,3-Dichloropropene	50	49.3	99	72-120
541-73-1	m-Dichlorobenzene	50	49.7	99	79-119
95-50-1	o-Dichlorobenzene	50	49.5	99	78-119
106-46-7	p-Dichlorobenzene	50	48.8	98	78-117
156-60-5	trans-1,2-Dichloroethylene	50	49.8	100	70-122
10061-02-6	trans-1,3-Dichloropropene	50	47.9	96	75-118
100-41-4	Ethylbenzene	50	49.9	100	77-120
74-83-9	Methyl bromide	50	45.8	92	52-156
74-87-3	Methyl chloride	50	48.7	97	63-142
75-09-2	Methylene chloride	50	50.3	101	51-142
1634-04-4	Methyl Tert Butyl Ether	50	50.0	100	77-131
71-55-6	1,1,1-Trichloroethane	50	50.7	101	70-131
79-34-5	1,1,2,2-Tetrachloroethane	50	46.4	93	76-121
79-00-5	1,1,2-Trichloroethane	50	47.3	95	77-118
127-18-4	Tetrachloroethylene	50	50.2	100	68-127
108-88-3	Toluene	50	50.3	101	74-118
79-01-6	Trichloroethylene	50	50.0	100	72-122
75-69-4	Trichlorofluoromethane	50	51.0	102	60-147
75-01-4	Vinyl chloride	50	48.5	97	64-144
	m,p-Xylene	100	101	101	79-122
95-47-6	o-Xylene	50	50.7	101	75-123

## Blank Spike Summary

Page 2 of 2

Job Number: F22105

Account: STOLCOGJ S M Stoller

Project: STAR Center- Ad-hoc PIN-AJ., Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ253-BS	J005689.D	1	02/20/04	RA	n/a	n/a	VJ253

The QC reported here applies to the following samples:

Method: SW846 8260B

F22105-1, F22105-2, F22105-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	78-123%
2037-26-5	Toluene-D8	98%	71-137%
460-00-4	4-Bromofluorobenzene	99%	61-157%
17060-07-0	1,2-Dichloroethane-D4	101%	74-125%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: F22105

Account: STOLCOGJ S M Stoller

Project: STAR Center- Ad-hoc PIN-AJ., Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F22223-3MS	J005692.D	1	02/20/04	RA	n/a	n/a	VJ253
F22223-3MSD	J005693.D	1	02/20/04	RA	n/a	n/a	VJ253
F22223-3	J005691.D	1	02/20/04	RA	n/a	n/a	VJ253

The QC reported here applies to the following samples:

Method: SW846 8260B

F22105-1, F22105-2, F22105-3

CAS No.	Compound	F22223-3 ug/kg	Spike Q	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	
71-43-2	Benzene	ND	4240	4150	98	4170	98	0	63-135/23	
75-27-4	Bromodichloromethane	ND	4240	3900	92	3980	94	2	63-126/23	
75-25-2	Bromoform	ND	4240	3240	76	3590	85	10	54-109/24	
108-90-7	Chlorobenzene	ND	4240	4250	100	4290	101	1	64-130/24	
75-00-3	Chloroethane	ND	4240	1630	38*	1530	36*	6	53-172/28	
67-66-3	Chloroform	ND	4240	4160	98	4190	99	1	68-131/24	
110-75-8	2-Chloroethyl vinyl ether	ND	21200	14200	67	14900	70	5	16-159/31	
56-23-5	Carbon tetrachloride	ND	4240	4010	94	4380	103	9	64-148/24	
75-34-3	1,1-Dichloroethane	ND	4240	4340	102	4350	102	0	64-130/25	
75-35-4	1,1-Dichloroethylene	ND	4240	4080	96	3950	93	3	55-149/28	
107-06-2	1,2-Dichloroethane	ND	4240	3640	86	3750	88	3	60-114/22	
78-87-5	1,2-Dichloropropane	ND	4240	4180	98	4290	101	3	65-128/23	
124-48-1	Dibromochloromethane	ND	4240	3700	87	3900	92	5	60-119/23	
75-71-8	Dichlorodifluoromethane	ND	4240	3190	75	3000	71	6	41-185/30	
156-59-2	cis-1,2-Dichloroethylene	ND	4240	4260	100	4340	102	2	66-132/24	
10061-01-5	cis-1,3-Dichloropropene	ND	4240	3890	92	3990	94	3	57-118/25	
541-73-1	m-Dichlorobenzene	ND	4240	4240	100	4310	102	2	59-138/28	
95-50-1	o-Dichlorobenzene	ND	4240	4100	97	4280	101	4	56-128/27	
106-46-7	p-Dichlorobenzene	ND	4240	4110	97	4200	99	2	57-134/26	
156-60-5	trans-1,2-Dichloroethylene	ND	4240	4260	100	4280	101	0	63-137/27	
10061-02-6	trans-1,3-Dichloropropene	ND	4240	3700	87	3780	89	2	58-115/25	
100-41-4	Ethylbenzene	ND	4240	4310	102	4290	101	0	63-142/25	
74-83-9	Methyl bromide	ND	4240	3480	82	3410	80	2	38-188/27	
74-87-3	Methyl chloride	ND	4240	3850	91	3850	91	0	57-160/29	
75-09-2	Methylene chloride	459	J	4240	4880	104	4840	103	1	40-183/34
1634-04-4	Methyl Tert Butyl Ether	1650		4240	5220	84	5570	92	6	53-122/28
71-55-6	1,1,1-Trichloroethane	ND	4240	4180	98	4130	97	1	70-149/25	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4240	3220	76	3420	81	6	45-121/33	
79-00-5	1,1,2-Trichloroethane	ND	4240	3650	86	3790	89	4	60-114/25	
127-18-4	Tetrachloroethylene	ND	4240	4740	112	5290	125	11	54-154/27	
108-88-3	Toluene	ND	4240	4480	106	4540	107	1	62-142/29	
79-01-6	Trichloroethylene	ND	4240	4200	99	4220	99	0	59-143/25	
75-69-4	Trichlorofluoromethane	ND	4240	3180	75	3020	71	5	59-171/28	
75-01-4	Vinyl chloride	ND	4240	4490	106	4480	106	0	64-165/27	
	m,p-Xylene	ND	8490	8710	103	8740	103	0	61-146/25	
95-47-6	o-Xylene	ND	4240	4390	103	4500	106	2	60-141/25	

## Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: F22105

Account: STOLCOGJ S M Stoller

Project: STAR Center- Ad-hoc PIN-AJ., Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F22223-3MS	J005692.D	1	02/20/04	RA	n/a	n/a	VJ253
F22223-3MSD	J005693.D	1	02/20/04	RA	n/a	n/a	VJ253
F22223-3	J005691.D	1	02/20/04	RA	n/a	n/a	VJ253

The QC reported here applies to the following samples:

Method: SW846 8260B

F22105-1, F22105-2, F22105-3

CAS No.	Surrogate Recoveries	MS	MSD	F22223-3	Limits
1868-53-7	Dibromofluoromethane	96%	96%	98%	78-123%
2037-26-5	Toluene-D8	99%	100%	96%	71-137%
460-00-4	4-Bromofluorobenzene	97%	99%	99%	61-157%
17060-07-0	1,2-Dichloroethane-D4	87%	87%	97%	74-125%



Southeast

03/31/04

Technical Report for

---

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F22683

---

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **27**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads "Behzadi".

Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F22683

STAR Center- 4.5 Acre Site, Largo, FL  
Project No: 110406202

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
F22683-1	03/10/04	16:00 JC	03/11/04	SO	Soil

---

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

**Accutest Laboratories Southeast, Inc.**  
**Analytical Narrative**

Client: S M Stoller  
Site: STAR Center- 4.5 Acre Site, Largo FL  
Job No.: F22683  
Report Date: March 17, 2004

1 sample was collected on March 10, 2004 and received on March 11, 2004. Samples were intact and properly cooled. A listing of the Laboratory Sample ID, Client Sample ID, and dates of collection are presented in the Results Summary section of this report.

All method specified holding times, calibrations and quality control performance criteria were met, with the following notes.

**VOCs, SW846 8260:**

- Sample PIN20-CL01-N001 (F22683-1) was received in a bulk container and preserved within 48 hours of sampling. Data has been footnoted accordingly.

**Metals, SW846 6010/7000:**

- Sample PIN20-CL01-N001 (F22683-1) has an elevated reporting limit for Selenium due to matrix interference. Data has been footnoted accordingly.
- The Duplicate associated with batch MP6448 had one RPD above acceptance limits. The Blank Spike was within limits. Data not adversely affected.
- The Serial Dilution associated with batch MP6448 had various RPDs above acceptance limits. The Blank Spike was within limits. Data not adversely affected.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

---

Sue O. Bell, Project Manager (signature on file)

Date: March 17, 2004

**Report of Analysis**

Page 1 of 2

3.1

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**Client Sample ID:** PIN20-CL01-N001**Lab Sample ID:** F22683-1**Date Sampled:** 03/10/04**Matrix:** SO - Soil**Date Received:** 03/11/04**Method:** SW846 8260B**Percent Solids:** 86.7**Project:** STAR Center- 4.5 Acre Site, Largo, FL

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	K016096.D	1	03/12/04	NAF	n/a	n/a	VK726
Run #2							

**Initial Weight**

Run #1 5.28 g

Run #2

**VOA Special List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	5.5	2.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	2.2	ug/kg	
75-25-2	Bromoform	ND	5.5	2.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	2.2	ug/kg	
75-00-3	Chloroethane	ND	5.5	2.2	ug/kg	
67-66-3	Chloroform	ND	5.5	2.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	27	11	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	2.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	2.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.5	3.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.5	2.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	2.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	2.2	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.5	3.3	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.5	2.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	2.2	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.5	2.2	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.5	2.2	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.5	2.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.5	2.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.5	2.2	ug/kg	
74-83-9	Methyl bromide	ND	5.5	2.2	ug/kg	
74-87-3	Methyl chloride	ND	5.5	2.2	ug/kg	
75-09-2	Methylene chloride	ND	11	5.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.5	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	2.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	2.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.5	2.2	ug/kg	
108-88-3	Toluene	ND	5.5	2.2	ug/kg	
79-01-6	Trichloroethylene	ND	5.5	2.2	ug/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 2 of 2

3-1

3

<b>Client Sample ID:</b>	PIN20-CL01-N001	<b>Date Sampled:</b>	03/10/04
<b>Lab Sample ID:</b>	F22683-1	<b>Date Received:</b>	03/11/04
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	86.7
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	5.5	2.7	ug/kg	
75-01-4	Vinyl chloride	ND	5.5	2.7	ug/kg	
	m,p-Xylene	ND	11	2.7	ug/kg	
95-47-6	o-Xylene	ND	5.5	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		78-123%
2037-26-5	Toluene-D8	99%		71-137%
460-00-4	4-Bromofluorobenzene	104%		61-157%
17060-07-0	1,2-Dichloroethane-D4	91%		74-125%

(a) Sample was received in a bulk container and preserved within 48 hours of sampling.

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 1

3-1  
3

<b>Client Sample ID:</b>	PIN20-CL01-N001	<b>Date Sampled:</b>	03/10/04
<b>Lab Sample ID:</b>	F22683-1	<b>Date Received:</b>	03/11/04
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	86.7
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

**Metals Analysis**

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.6	0.57	0.40	mg/kg	1	03/11/04	03/11/04	DM	SW846 6010B <sup>2</sup>
Barium	3.2 B	23	0.20	mg/kg	1	03/11/04	03/11/04	DM	SW846 6010B <sup>2</sup>
Cadmium	0.23 B	0.45	0.045	mg/kg	1	03/11/04	03/11/04	DM	SW846 6010B <sup>2</sup>
Chromium	10.1	1.1	0.43	mg/kg	1	03/11/04	03/11/04	DM	SW846 6010B <sup>2</sup>
Lead	0.37 U	11	0.37	mg/kg	1	03/11/04	03/11/04	DM	SW846 6010B <sup>2</sup>
Mercury	0.0050 B	0.093	0.0024	mg/kg	1	03/11/04	03/11/04	SM	SW846 7471A <sup>1</sup>
Selenium <sup>a</sup>	26 U	44	26	mg/kg	1	03/11/04	03/11/04	DM	SW846 6010B <sup>2</sup>
Silver	0.16 U	1.1	0.16	mg/kg	1	03/11/04	03/11/04	DM	SW846 6010B <sup>2</sup>

(1) Instrument QC Batch: MA3718

(2) Instrument QC Batch: MA3719

(3) Prep QC Batch: MP6441

(4) Prep QC Batch: MP6448

(a) Elevated reporting limits due to matrix interference.

RL = Reporting Limit  
 MDL = Method Detection Limit

U = Indicates a result < MDL  
 B = Indicates a result ≥ MDL but < RL

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

ACCUTEST QUOTE #:

F22683

CLIENT INFORMATION			FACILITY INFORMATION			ANALYTICAL INFORMATION			MATRIX CODES		
NAME: S.M. Stoller ADDRESS: 7887 Bryan Dairy Rd., Suite 260 CITY: Largo, FL ZIP: 33777 BEND REPORT TO: Keith Miller PHONE #: 970-248-6578 FAX #: 727-549-1121			PROJECT NAME: STAR Center - 4.5 Acre Site LOCATION: Large, FL PROJECT NO.: 110406202 On-site contact: Julian Caballero						DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID		
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			MATRIX	ACID	BOTTLED	PRESERVATION	LAB USE ONLY		
		DATE	TIME	SAMPLED BY:							H2O
1	PIN20-CLO1-N001	3-10-04	1600	OF	50	2		2	1	1	
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION			COMMENTS/REMARKS					
<input type="checkbox"/> STANDARD <input checked="" type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER _____ <small>EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED</small>			<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____			<small>Need 48-hr turnaround</small>					
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY											
RELINQUISHED BY SAMPLER: 1. <i>Julian C.</i>	DATE/TIME: 3-10-04/1700	RECEIVED BY: 1. FedEx	RELINQUISHED BY: 2. FedEx	DATE/TIME: 3/11/04 09:00	RECEIVED BY: 2. Jeff Mitchell						
RELINQUISHED BY: 3.	DATE/TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE/TIME:	RECEIVED BY: 4.						
RELINQUISHED BY: 5.	DATE/TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE <input type="checkbox"/>		ON ICE <input type="checkbox"/>	TEMPERATURE <u>32°C</u>				

F22683: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number:

F22683

Client: S.M. Stoller

Project: STAR Center - 4.5 Acre Site

Date Received: 3/11/04

Time Received: 09:00

# of Coolers Received: 1

Cooler Temperatures: 3.2°C

Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other

Air Bill Number: 7900 8297 2940

Cooler Custody Seals Intact ?

Yes

No

Chain of Custody Provided ?

Yes

No

COC Match Bottle Label ID's ?

Yes

No

Sample Labels Present on all bottles ?

Yes

No

All Analyses Marked On COC ?

Yes

No

Are All Bottles Intact ?

Yes

No

Samples Preserved Correctly ?

Yes

No

Correct Number of Containers Used ?

Yes

No

Sufficient Sample Volume ?

Yes

No

Trip Blank Provided ?

Yes

No

Trip Blank on COC ?

Yes

No

Trip Blank Intact ?

Yes

No

N/A

Trip Blank Matrix ?

Soil

Water

N/A

Number of Enclosures ?

0

Number of Soil Field Kits ?

0

Summary of Comments:

Signature: W. Nichols

Date: 3/11/04

Review Signature: KBD

ASBD 12/30/03

F22683: Chain of Custody

Page 2 of 2

## GC/MS Volatiles

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5

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

Page 1 of 2

Job Number: F22683

Account: STOLCOGJ S M Stoller

Project: STAR Center- 4.5 Acre Site, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK726-MB	K016095.D	1	03/12/04	NAF	n/a	n/a	VK726

The QC reported here applies to the following samples:

Method: SW846 8260B

F22683-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	2.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	2.0	ug/kg	
75-25-2	Bromoform	ND	5.0	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	2.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	2.0	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	2.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	3.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	2.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	3.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	2.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	2.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene chloride	ND	10	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	2.0	ug/kg	
108-88-3	Toluene	ND	5.0	2.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	2.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.5	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	2.5	ug/kg	
	m,p-Xylene	ND	10	2.5	ug/kg	
95-47-6	o-Xylene	ND	5.0	2.0	ug/kg	

## Method Blank Summary

Page 2 of 2

Job Number: F22683

Account: STOLCOGJ S M Stoller

Project: STAR Center- 4.5 Acre Site, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK726-MB	K016095.D	1	03/12/04	NAF	n/a	n/a	VK726

The QC reported here applies to the following samples:

Method: SW846 8260B

F22683-1

### CAS No. Surrogate Recoveries Limits

1868-53-7	Dibromofluoromethane	100%	78-123%
2037-26-5	Toluene-D8	97%	71-137%
460-00-4	4-Bromofluorobenzene	100%	61-157%
17060-07-0	1,2-Dichloroethane-D4	99%	74-125%

## Blank Spike Summary

Page 1 of 2

Job Number: F22683

Account: STOLCOGJ S M Stoller

Project: STAR Center- 4.5 Acre Site, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK726-BS	K016094.D	1	03/12/04	NAF	n/a	n/a	VK726

The QC reported here applies to the following samples:

Method: SW846 8260B

F22683-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	49.9	100	74-124
75-27-4	Bromodichloromethane	50	50.9	102	74-124
75-25-2	Bromoform	50	53.0	106	79-127
108-90-7	Chlorobenzene	50	48.5	97	78-117
75-00-3	Chloroethane	50	48.5	97	63-147
67-66-3	Chloroform	50	50.6	101	75-121
110-75-8	2-Chloroethyl vinyl ether	250	219	88	31-165
56-23-5	Carbon tetrachloride	50	51.1	102	67-131
75-34-3	1,1-Dichloroethane	50	50.8	102	71-118
75-35-4	1,1-Dichloroethylene	50	47.5	95	64-126
107-06-2	1,2-Dichloroethane	50	51.3	103	72-120
78-87-5	1,2-Dichloropropane	50	50.7	101	74-126
124-48-1	Dibromochloromethane	50	51.7	103	78-120
75-71-8	Dichlorodifluoromethane	50	54.0	108	33-172
156-59-2	cis-1,2-Dichloroethylene	50	50.5	101	75-124
10061-01-5	cis-1,3-Dichloropropene	50	51.6	103	72-120
541-73-1	m-Dichlorobenzene	50	48.8	98	79-119
95-50-1	o-Dichlorobenzene	50	49.4	99	78-119
106-46-7	p-Dichlorobenzene	50	48.4	97	78-117
156-60-5	trans-1,2-Dichloroethylene	50	49.0	98	70-122
10061-02-6	trans-1,3-Dichloropropene	50	48.7	97	75-118
100-41-4	Ethylbenzene	50	47.7	95	77-120
74-83-9	Methyl bromide	50	47.8	96	52-156
74-87-3	Methyl chloride	50	49.0	98	63-142
75-09-2	Methylene chloride	50	49.6	99	51-142
1634-04-4	Methyl Tert Butyl Ether	50	55.0	110	77-131
71-55-6	1,1,1-Trichloroethane	50	50.5	101	70-131
79-34-5	1,1,2,2-Tetrachloroethane	50	48.8	98	76-121
79-00-5	1,1,2-Trichloroethane	50	48.5	97	77-118
127-18-4	Tetrachloroethylene	50	48.7	97	68-127
108-88-3	Toluene	50	46.7	93	74-118
79-01-6	Trichloroethylene	50	49.4	99	72-122
75-69-4	Trichlorofluoromethane	50	51.4	103	60-147
75-01-4	Vinyl chloride	50	47.3	95	64-144
	m,p-Xylene	100	96.4	96	79-122
95-47-6	o-Xylene	50	47.8	96	75-123

## Blank Spike Summary

Page 2 of 2

Job Number: F22683

Account: STOLCOGJ S M Stoller

Project: STAR Center- 4.5 Acre Site, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK726-BS	K016094.D	1	03/12/04	NAF	n/a	n/a	VK726

The QC reported here applies to the following samples:

Method: SW846 8260B

F22683-1

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	78-123%
2037-26-5	Toluene-D8	95%	71-137%
460-00-4	4-Bromofluorobenzene	98%	61-157%
17060-07-0	1,2-Dichloroethane-D4	100%	74-125%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: F22683

Account: STOLCOGJ S M Stoller

Project: STAR Center- 4.5 Acre Site, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F22683-1MS	K016103.D	1	03/12/04	NAF	n/a	n/a	VK726
F22683-1MSD	K016104.D	1	03/12/04	NAF	n/a	n/a	VK726
F22683-1 <sup>a</sup>	K016096.D	1	03/12/04	NAF	n/a	n/a	VK726

The QC reported here applies to the following samples:

Method: SW846 8260B

F22683-1

CAS No.	Compound	F22683-1 ug/kg	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	58.4	62.7	107	61.4	107	2	63-135/23
75-27-4	Bromodichloromethane	ND	58.4	59.7	102	57.6	100	4	63-126/23
75-25-2	Bromoform	ND	58.4	53.3	91	47.4	82	12	54-109/24
108-90-7	Chlorobenzene	ND	58.4	61.1	105	59.2	103	3	64-130/24
75-00-3	Chloroethane	ND	58.4	60.6	104	59.7	104	1	53-172/28
67-66-3	Chloroform	ND	58.4	61.7	106	60.8	106	1	68-131/24
110-75-8	2-Chloroethyl vinyl ether	ND	292	202	69	175	61	14	16-159/31
56-23-5	Carbon tetrachloride	ND	58.4	62.2	107	62.4	108	0	64-148/24
75-34-3	1,1-Dichloroethane	ND	58.4	62.9	108	61.4	107	2	64-130/25
75-35-4	1,1-Dichloroethylene	ND	58.4	57.1	98	57.2	99	0	55-149/28
107-06-2	1,2-Dichloroethane	ND	58.4	56.2	96	52.3	91	7	60-114/22
78-87-5	1,2-Dichloropropane	ND	58.4	62.9	108	60.1	104	5	65-128/23
124-48-1	Dibromochloromethane	ND	58.4	57.1	98	53.1	92	7	60-119/23
75-71-8	Dichlorodifluoromethane	ND	58.4	63.8	109	64.2	112	1	41-185/30
156-59-2	cis-1,2-Dichloroethylene	ND	58.4	61.1	105	60.5	105	1	66-132/24
10061-01-5	cis-1,3-Dichloropropene	ND	58.4	62.0	106	58.8	102	5	57-118/25
541-73-1	m-Dichlorobenzene	ND	58.4	60.6	104	58.8	102	3	59-138/28
95-50-1	o-Dichlorobenzene	ND	58.4	58.1	100	55.8	97	4	56-128/27
106-46-7	p-Dichlorobenzene	ND	58.4	58.8	101	57.5	100	2	57-134/26
156-60-5	trans-1,2-Dichloroethylene	ND	58.4	61.2	105	59.8	104	2	63-137/27
10061-02-6	trans-1,3-Dichloropropene	ND	58.4	56.2	96	51.6	90	9	58-115/25
100-41-4	Ethylbenzene	ND	58.4	62.2	107	61.4	107	1	63-142/25
74-83-9	Methyl bromide	ND	58.4	57.1	98	58.5	102	2	38-188/27
74-87-3	Methyl chloride	ND	58.4	62.7	107	62.1	108	1	57-160/29
75-09-2	Methylene chloride	ND	58.4	69.8	120	67.8	118	3	40-183/34
1634-04-4	Methyl Tert Butyl Ether	ND	58.4	55.7	95	54.2	94	3	53-122/28
71-55-6	1,1,1-Trichloroethane	ND	58.4	62.5	107	62.4	108	0	70-149/25
79-34-5	1,1,2,2-Tetrachloroethane	ND	58.4	45.9	79	40.1	70	13	45-121/33
79-00-5	1,1,2-Trichloroethane	ND	58.4	53.9	92	48.8	85	10	60-114/25
127-18-4	Tetrachloroethylene	ND	58.4	64.2	110	63.1	110	2	54-154/27
108-88-3	Toluene	ND	58.4	61.8	106	60.2	105	3	62-142/29
79-01-6	Trichloroethylene	ND	58.4	67.3	115	66.1	115	2	59-143/25
75-69-4	Trichlorofluoromethane	ND	58.4	61.7	106	63.1	110	2	59-171/28
75-01-4	Vinyl chloride	ND	58.4	61.2	105	61.6	107	1	64-165/27
	m,p-Xylene	ND	117	126	108	124	108	2	61-146/25
95-47-6	o-Xylene	ND	58.4	61.7	106	60.5	105	2	60-141/25

## Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: F22683

Account: STOLCOGJ S M Stoller

Project: STAR Center- 4.5 Acre Site, Largo, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F22683-1MS	K016103.D	1	03/12/04	NAF	n/a	n/a	VK726
F22683-1MSD	K016104.D	1	03/12/04	NAF	n/a	n/a	VK726
F22683-1 <sup>a</sup>	K016096.D	1	03/12/04	NAF	n/a	n/a	VK726

The QC reported here applies to the following samples:

Method: SW846 8260B

F22683-1

CAS No.	Surrogate Recoveries	MS	MSD	F22683-1	Limits
1868-53-7	Dibromofluoromethane	97%	97%	100%	78-123%
2037-26-5	Toluene-D8	97%	98%	99%	71-137%
460-00-4	4-Bromofluorobenzene	99%	100%	104%	61-157%
17060-07-0	1,2-Dichloroethane-D4	89%	92%	91%	74-125%

(a) Sample was received in a bulk container and preserved within 48 hours of sampling.



## Metals Analysis

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: F22683  
Account: STOLCOGJ - S M Stoller  
Project: STAR Center- 4.5 Acre Site, Largo, FL

QC Batch ID: MP6441  
Matrix Type: SOLID

Methods: SW846 7471A  
Units: mg/kg

Prep Date: 03/11/04

Metal	RL	IDL	MB raw	final
Mercury	0.083	.0018	0.0023	<0.083

Associated samples MP6441: F22683-1

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.1  
6

## MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F22683  
 Account: STOLCOGJ - S M Stoller  
 Project: STAR Center- 4.5 Acre Site, Largo, FL

QC Batch ID: MP6441  
 Matrix Type: SOLID

Methods: SW846 7471A  
 Units: mg/kg

Prep Date:

03/11/04

03/11/04

Metal	F22634-1		QC Li mits	F22634-1		Spi kel ot HGFLWS1	% Rec	QC Li mits	
	Original	DUP	RPD	Original	MS				
Mercury	0.0053	0.0088	49.6	0-68	0.0053	0.32	0.3	106.0	47-157

Associated samples MP6441: F22683-1

Results &lt; IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

6.1.2  
6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F22683  
Account: STOLCOGJ - S M Stoller  
Project: STAR Center- 4.5 Acre Site, Largo, FL

QC Batch ID: MP6441  
Matrix Type: SOLID

Methods: SW846 7471A  
Units: mg/kg

Prep Date: 03/11/04

Metal	F22634-1 Original	MSD	Spike lot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0053	0.35	0.3	114.2	9.0	30

Associated samples MP6441: F22683-1

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

6.1.2  
6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F22683  
Account: STOLCOGJ - S M Stoller  
Project: STAR Center- 4.5 Acre Site, Largo, FL

QC Batch ID: MP6441  
Matrix Type: SOLID

Methods: SW846 7471A  
Units: mg/kg

Prep Date: 03/11/04

Metal	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.25	0.25	100.0	80-120

Associated samples MP6441: F22683-1

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.3  
6

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: F22683  
Account: STOLCOGJ - S M Stoller  
Project: STAR Center- 4.5 Acre Site, Largo, FL

QC Batch ID: MP6448  
Matrix Type: SOLID

Methods: SW846 6010B  
Units: mg/kg

Prep Date: 03/11/04

Metal	RL	IDL	MB raw	final
Aluminum	20	.66		
Antimony	6.0	.15		
Arsenic	0.50	.28	0.14	<0.50
Barium	20	.05	0.0030	<20
Beryllium	0.50	.03		
Cadmium	0.40	.03	-0.086	<0.40
Calcium	500	.38		
Chromium	1.0	.04	-0.033	<1.0
Cobalt	5.0	.05		
Copper	2.5	.044		
Iron	10	.71		
Lead	10	.12	0.092	<10
Magnesium	500	.99		
Manganese	1.5	.016		
Molybdenum	5.0	.075		
Nickel	4.0	.11		
Potassium	500	1.4		
Selenium	10	.2	0.48	<10
Silver	1.0	.06	0.031	<1.0
Sodium	500	15		
Thallium	1.0	.15		
Tin	5.0	.15		
Vanadium	5.0	.047		
Zinc	2.0	.059		

Associated samples MP6448: F22683-1

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

6.2.1  
6

## MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F22683  
 Account: STOLCOGJ - S M Stoller  
 Project: STAR Center- 4.5 Acre Site, Largo, FL

QC Batch ID: MP6448  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date:

03/11/04

03/11/04

Metal	F22585-1 Original	DUP	RPD	QC Li mits	F22585-1 Original	MS	Spi kel ot MPFLICP	% Rec	QC Li mits
<b>Al umi num</b>									
<b>Anti mony</b>									
Arseni c	1. 2	1. 1	8. 7	0-20	1. 2	431	526	81. 8	75-113
Bari um	75. 4	81. 4	7. 7	0-20	75. 4	523	526	85. 1	75-122
<b>Berylli um</b>									
Cadmi um	0. 0	0. 0	NC	0-20	0. 0	11. 0	13. 1	83. 7	75-116
<b>Cal ci um</b>									
Chromi um	7. 4	8. 4	12. 7	0-20	7. 4	51. 6	52. 6	84. 1	75-125
<b>Cobal t</b>									
Copper									
<b>I ron</b>									
Lead	4. 6	5. 0	8. 3	0-20	4. 6	114	131	83. 2	75-121
<b>Magnesi um</b>									
Manganese									
<b>Mol ybdenum</b>									
Ni ckel									
<b>Potassi um</b>									
Sel eni um	0. 50	0. 35	35. 3 (a)	0-20	0. 50	432	526	82. 1	75-110
Sil ver	0. 0	0. 0	NC	0-20	0. 0	10. 9	13. 1	82. 9	75-120
<b>Sodi um</b>									
Thall i um									
<b>Tin</b>									
Vanadi um									
Zinc									

Associated samples MP6448: F22683-1

Results &lt; IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

6.2.2  
6

## MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F22683  
 Account: STOLCOGJ - S M Stoller  
 Project: STAR Center- 4.5 Acre Site, Largo, FL

QC Batch ID: MP6448  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 03/11/04

Metal	F22585-1 Original	MSD	Spike lot MPFLICP	% Rec	MSD RPD	QC Limit
<b>Aluminum</b>						
<b>Antimony</b>						
Arsenic	1.2	445	547	81.1	3.2	30
Barium	75.4	542	547	85.3	3.6	30
<b>Beryllium</b>						
Cadmium	0.0	11.5	13.7	84.1	4.4	30
<b>Calcium</b>						
Chromium	7.4	54.2	54.7	85.5	4.9	30
<b>Cobalt</b>						
<b>Copper</b>						
<b>Iron</b>						
Lead	4.6	118	137	82.9	3.4	30
<b>Magnesium</b>						
<b>Manganese</b>						
<b>Molybdenum</b>						
<b>Nickel</b>						
<b>Potassium</b>						
Selenium	0.50	444	547	81.1	2.7	30
Silver	0.0	11.4	13.7	83.3	4.5	30
<b>Sodium</b>						
<b>Thallium</b>						
<b>Tin</b>						
<b>Vanadium</b>						
Zinc						

Associated samples MP6448: F22683-1

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

6.2.2  
6

## SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F22683  
 Account: STOLCOGJ - S M Stoller  
 Project: STAR Center- 4.5 Acre Site, Largo, FL

QC Batch ID: MP6448  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 03/11/04

Metal	BSP Result	Spike lot MPFLICP	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	393	400	98.3	80-120
Barium	407	400	101.8	80-120
Beryllium				
Cadmium	10.2	10	102.0	80-120
Calcium				
Chromium	40.3	40	100.8	80-120
Cobalt				
Copper				
Iron				
Lead	101	100	101.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	391	400	97.8	80-120
Silver	10	10	100.0	80-120
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP6448: F22683-1

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

6.2.3  
 6

## SERIAL DILUTION RESULTS SUMMARY

Login Number: F22683  
 Account: STOLCOGJ - S M Stoller  
 Project: STAR Center- 4.5 Acre Site, Largo, FL

QC Batch ID: MP6448  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 03/11/04

Metal	F22585-1 Original	SDL 1:5	RPD	QC Limits
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Aluminum				
Antimony				
Arsenic	9.31	0.00	100.0(a)	0-10
Barium	596	678	13.7*(b)	0-10
Beryllium				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	58.4	71.1	21.8*(b)	0-10
Cobalt				
Copper				
Iron				
Lead	36.6	48.6	32.6 (a)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	3.96	13.0	227.5(a)	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP6448: F22683-1

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.